UNCLASSIFIED

AD NUMBER AD405169 **NEW LIMITATION CHANGE** TO Approved for public release, distribution unlimited **FROM** Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; Apr 1963. Other requests shall be referred to Central Intelligence Agency, Office of Central Reference, 2430 E. Street, NW, Washington, DC 20505. **AUTHORITY** CIA ltr, 7 Sep 2004

NOTICE: When government or other drawings, specifications or ther data are used for any purpose other than in connection with a definitely related government procurement operation, the U.S. Government thereby incurs no responsibility, nor any obligation whatseever; and the fact that the Government may have formulated, furnished, or in any way supplied the said drawings, specifications, or other data is not to be regarded by implication or otherwise as in any manner licensing the holder or any other person or corporation, or conveying any rights or permission to manufacture, use or sell any patented invention that may in any way be related thereto.

405169

FOR OFFICIAL USE ONLY

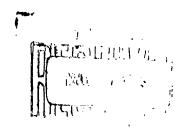


CONSOLIDATED TRANSLATION SURVEY

Number 64

For April 1963





Prepared by

Foreign Documents Division
CENTRAL INTELLIGENCE AGENCY
2430 E St., N. W., Washington 25, D. C.

FOR OFFICIAL USE ONLY



CONSOLIDATED TRANSLATION SURVEY

FOR APRIL 1963

TABLE OF CONTENTS

	Page
Notes concerning the survey	c
Request for copies	d
USSR	
Economic Political Military Geographic	1 15 16 17
Sociologica l	18
Eastern Burope	
Reconomic Political Military Sociological Biographic	20 46 49 52 56
Western Europe	
Economic Political Military Geographic Sociological	57 58 60 61 61
Africa	
Economic Military Sociological	62 62 62
Middle East	
Economic Political Military	62 63 63

	Page
Far Hast	
Economic	64
Political	66
Military	68
Geographic	69 69
Sociological	71
Biographic	, 1
Latin America	
Economic	71
Political	72
Geographic	72 73
Sociological	/3
North America	
Economic	74
Political	74
Geographic	74
World Wide	
Political	74
Scientific	
Aerospace	75
Agriculturo	79
Biological & Medical Sciences	82
Chemistry	94
Harth Sciences & Astronomy	105 114
Electronics	122
Engineering Fuels & Propulsion	134
Materials & Metallurgy	135
Mathematics & Data Processing	150
Nuclear Science & Technology	152
Physics	157
Miscellaneous	176
Information on Cover-to Cover Translations	178
Author Index	249

CONSOLIDATED TRANSLATION SURVEY

An author index to items in this issue is appended.

This Survey is prepared monthly by Foreign Documents Division, CIA, from lists received through cooperation of US government agencies and includes translations of such agencies, private industry, universities, research institutions, and commercial translation organizations. It is a compilation of foreign documentary projects, completed or started during the month preceding this publication.

Translations are listed by area and subject category. Scientific projects are grouped as a section regardless of geographic area. Title in English, author, foreign language title of source of material, date and data of publication, and publication identification of the completed project are given when available.

Some of the above details may be unavailable on projects listed "in process." New projects in process will be listed only once, their subsequent listing being made when they are reported completed. Projects in process, i.e., not completed as of the date of this Survey, are noted with an asterisk (*), and when available, a project-control or "in-process" number is noted in parentheses following the title.

REQUESTS FOR COPIES

Requests for copies of published projects should be made direct to the designated producing organization.

All requests for items prefixed by "CIA" should be addressed to Office of Central Reference, 2430 E Street, NW, Washington DC.

Addresses of producers follow:

ACIC

Aeronautical Chart and Information Center -- (see OTS)

ACSI

Department of Army Assistant Chief of Staff, Intelligence Intelligence Documents Branch Washington 25, DC

Requests from non-Government sources for Army documents should be ordered through

Dept of Commerce Office of Technical Services Washington 25, DC

ACSII.

Admiralty Center for Scientific Information and Liasion Queen Anne's Mansions St James Park London, SW 1, England

AEC - Atomic Energy Commission (see Department of Commorce)

AERE, Harwell

The Librarian AERE, Ministry of Supply Harwell, Didcot, Birks England

AF

Department of Air Force C::llection and Dissemination Assistant Chief of Staff, Intelligence ATTN: AFCIN 1B3 Washington 25, DC Air Force Cambridge Research Laboratories Research Library Office of Aerospace Research United States Air Force Laurence G. Hanscom Field Bedford, Massachusetts ATTN: CRXLR

AGI

American Geological Institute 2101 Constitution Avenue, NW Washington 25, DC

AGU

American Geophysical Union 1515 Massachusetts Avenue, NW Washington 5, DC

AIAA

American Institute of Aeronautics & Astronautics 500 Fifth Avenue, New York 36, N.Y.

AID - Aerospace Information Division (see AF)

AIEE

American Institute of Electrical Engineers Special Subscription Department 41 East 28th Street New York 16, New York

AIP

American Institute of Physics 335 East 45th Street New York 17, New York

Amer Math Soc

American Mathematical Society 190 Hope Street Providence 6, Rhode Island

AMS - Army Map Service (see ACSI)

Army Materiel Command

U.S. Army Foreign Science and Technology Center Arlington Hall Station ATTN: AMXST-SD-TD Washington 25, DC

where the state of the manufacture to see a manufacture to the

AWRE -- (see AEC)

BCIRA

British Cast Iron Research Association Bordesley Hall Alvechurch, Birmingham England

BISI

British Iron and Steel Institute 4 Grosvenor Gardens London, SW 1, England

BuShips - Bureau of Ships (see Navy)

BWRA

British Welding Research Association Abington Hall, Abington Cambridge, England

CB

Consultants Bureau, Inc. 227 West 17th Street New York 11, New York

Cleaver-Hume Press Ltd

Cleaver Hume Press Ltd 31 Wright's Lane London, W 8, England

CRL

Central Research Laboratories, Research Division Broken Hill Proprietary Co, Ltd, Shortland, 2N, New South Whales Australia

CS

Chemical Society
Burlington House
London W.1., England

CSIRO

Commonwealth Scientific and Industrial Research Organization 314 Albert Street East Melbourne, C 2, Victoria Australia

CTRA

The Coal Tar Research Association Oxford Road Gomersal, Leeds England

CTT

Columbia Technical Translations 5 Vermont Avenue White Plains, New York

Dept of Com

Department of Commerce Office of Technical Services Washington 25, DC

Dept of Int

Department of Interior Library Washington 25, DC

DSIR

Department of Scientific and Industrial Research Records Section Charles House 5-11 Regent Street London, SW 1, England

FTD - Foreign Technology Division (see AF)

GB

Association of Special Libraries and Information Bureau 3 Belgrave Square London SW 1, England

Geochen Soc

Prof E. Wm. Heinrich Mineralogical Laboratory University of Michigan Ann Arbor, Michigan Henry Brutcher Technical Translation PO Box 157 Altadena, California

HO - Hydrographics Office (see Navy)

ID - Intelligence Document (see ACSI)

INSDOC

Insdoc, National Physical Laboratory of India, Hillside Road, New Delhi-12.

ISA

Instrument Society of America 313 Sixth Avenue Pittsburgh 22, Pensylvania

JPRS

Joint Publications Research Service Building T-30 Ohio Drive & Independence Avenue, S. W. Washington 25, DC

MEB

Mark E. Burgunker 541 West 113th Street New York 25, New York

MU

University of Melbourne, Languages Section, Faculty of Science, Parkville, N2, Victoria, Australia

NASA

National Aeronautics and Space Administration 1512 H Street, NW Washington 25, DC

Natl Bu Stand

National Bureau of Standards ATTN: Dr Henry Birnbaum Room 314, South Building Washington, DC

Navy

Department of Navy Office of Naval Intelligence Washington 25, DC

NIII

National Institutes of Health Translating Section, Library Building 10, Room 11N112 Bethesda 14, Maryland

NLL

National Lending Library for Science and Technology Boston Spa, Yorkshire, England

NNS - Navy Medical School (see Navy)

NRC/C

National Research Council, Canada The Library Sussex Drive Ottawa 2, Canada

NRL - Naval Research Laboratories (see Navy)

NZDIA

Department of Internal Affairs, Translation Service, Wellington, New Zealand

ONI - Office of Naval Intelligence (see Navy)

OSA

Optical Society of America 1155 16th St, NW Washington 5, DC

OTS

Office of Technical Services
Department of Commerce
Washington 25, DC
(Also available through Department of Commerce
Field Offices)

Patent Office

Patent Office Scientific Library 14th and Constitution Avenue, NW Washington, DC

PS

Primary Sources
11 Bleecker Street
New York 12, New York

RAPRA

Rubber and Plastics Research Association of Great Britain Shawbur Shrewsburg, England

All Orders from the American Continents:

Palmerton Publishing Company, Inc. 101 West 31st Street New York 1, New York

RRG

Roview of Russian Geology Box 6665, College Station Duke University Durham, North Carolina

Taylor and Francis Ltd.

Taylor and Francis Ltd. Rod Lion Court, Fleet Street London, E. C. 4, England

TIL - Technical Information Library

Ministry of Aviation TIL 1(b) Leysdown Road Mottinghan London SE9, England

UKAEA

United Kingdom Atomic Energy Authority Development and Engineering Group Risley, Warrington, Lancs, England USRL - US Research Laboratory (see Navy)

Weather Bur -- See Department of Commerce

519th MI Bn - 519th Military Intelligence Battalion (see ACSI)

525th MI Gp - 525th Military Intelligence Group (see ACSI)

北京できる

<u>PRUJECTS REPORTED</u> <u>FOR APRIL 1963</u>

USSR

Economic

Analytical Production Control in the Nitrogen Industry, by S. S. Markov, Ye. V. Valikova, 239 pp. RUSSIAN, bk, Analiticheskiy Kontrol' Proizvodstva v Alotnoy Promyshlennosti, No 12, 1960, pp 1-229. 9668191	FTD-TT-62-1808
The Atomic Industry, by P. T. Astashenkov. RUSSIAN, bk, Atomnaya Promyshlennost, 1962.	*ACSI I-2400 1D 2229439 525th MI Bn
Economics of Agricultural Enterprises, 30 pp. RUSSIAN, bk, Ekonomika Sel'skokhozyaystvennykh Predpriyatiy, Noscow, 1962, pp 214-240, 264, 265.	JPRS 18441
Cold Welding of Plastic Metals, by I. B. Baranov. (SF-2591) RUSSIAN, bk, Kholodnaya Svarka Plastichnykh Metallov, 1962, pp 1-152.	*JPRS
Circulation of Metal in the USSR National Economy, by Lev Lazarevich Zusman, 110 pp. RUSSIAN, bk, Krugooborot Metalla v Narodnom Khozyaystvo SSSR, Moscow, 1962, pp 26-39, 95-129, 158-199, 293-315.	JPRS 18404
Leno-Indigirskiy Rayon, 252 pp. RUSSIAN, bk, Spravochnik po Vodnym Resursam, Vol XVII, 1936, pp 100-368, 419-421.	ACS1 H-9953-B 1D 2174787
Agricultural Statistics, by S. V. Shol'ts, 52 pp. RUSSIAN, bk, Statistika Sel'skogo Khozyaysta, Moscow, 1956, pp 164-192.	JPRS 18439
Agricultural Statistics, by A. I. Gozulov, 45 pp. RUSSIAN, bk, Statistika Sel'skogo Khozyaystva, Moscow, 1959, pp 294-310, 320-327.	JPRS 18106
Questions of Planning in the USSR at the Contemporary Stage, by I. A. Yevenko, 7 pp. RUSSIAN, bk, Voprosy Planirovaniya y SSSR na Sovremennom Etape, Moscow, 1959, pp 31-33, 78-81.	JPRS 18359
Heavy Equipment Developed by the Uralmash Scientific Research Institute, by O. Sokolovskiy, 8 pp. RUSSIAN, per, Agitator, pp 31-33.	JPRS 18288

Reconstruction of the Yaroslavl' Motor Plant, by S. A. Nikitin, 10 pp. RUSSIAN, per, Avtomobil'naya Promishlennost, 1963, pp 1-4.	JPRS 18385
Extensive Use of Motor Transport Planned, by M. V. Vasil'yov, 8 pp. RUSSIAN, per, Avtomobil'naya Promishlennost', 1963, pp 4-7.	JPRS 18385
Western Economic Penetration Through Organization of Technical Servicing of Automobiles in Economically Under-Developed Countries, 41 pp. RUSSIAN, per, Byul Inostrannoy Kommercheskoy Informatsii, No 10, Dec 1962, pp 3-29.	JPRS 18176
The Tractor Market in the Capitalist World; Technical Advances in the Tractor Industry in the Postwar Period, 121 pp. RUSSIAN, per, Byul Inestrannoy Kommercheskoy Informatsii, No 10, Dec 1962, pp 30-111.	JPRS 18176
State Bank Tasks Outlined by Central Committee, CPSU, by A. Korovushkin, 24 pp. RUSSIAN, per, Den'gi i Kredit, No 1, 1963, pp 5-14.	JPRS 18594
The Establishment of the USSR Foreign Trade Bank. RUSSIAN, per, Den'gi i Kredit, No 1, 1963, pp 45-54.	JPRS 18477
In Order to Catch More Fish, by N. Nikolskiy. RUSSIAN, np. <u>Ekon Gazeta</u> , 1 Sep 1962.	Dept of Interior SH211 E82 No 414
Selected Articles From the Russian Newspaper Ekon Gazeta.	
20 Oct 1962, p 6. Problems of the Improving Motor Vehicle Production at the Belorussian Motor Vehicle Plant and in the Soviet Motor Vehicle Undustry, by 0. Latsis, 7 pp.	JPRS 18361
No 46, 1962. The Responsibility of Planners Must be Increased, 9 pp, (p 4).	JPRS 18726
Continuity in Planning, 12 pp, (pp 5, 6).	JPRS 18726
Toward a New Basis, 8 pp. (p 6).	JPRS 18726
Shekhtikhin's Proposal for Rational Utilization of Leather, 6 pp, (p 7).	JPRS 18726

Selected Articles From the Russian Newspaper Ekon Gazeta. (Contd)

The Administrative Structure and the Quality of Plans, 9 pp, (pp 7, 8).	JPRS 18726
Wages and Labor Productivity, 6 pp, (pp 8, 9).	JPRS 18726
Increasing the Output of Machinery, by G. Shcherban', 5 pp, (p 10).	JPRS 18133
Is There a Need for a Universal Index?, 14 pp, (pp 13, 14).	JPRS 18238
Plan and Fact Versus Plan and Standard, 16 pp, (pp 14-16).	JPRS 18238
Expansion and Improvement of Irrigation in the RSFSR, by N. Ovsyannikov, 6 pp, (p 27).	JPRS 18376
No 48, 1962. Model Charter for a Housing Construction Cooperative, 11 pp, (pp 31, 32).	JPRS 18646
The Installation of Outmoded Drilling Rigs, 6 pp, (p. 39).	JPRS 18134
No 49, 1 Dec 1962. At the Cherepovets Metallurgical Plant, by A. Borodulin, 8 pp, (p 8).	JPRS 18184
Production at the Kazakh Metallurgical Plant, by T. Bekenov. 6 pp. (p 9).	
New Tube Mill at the Pervoural'sk Tube Plant, by F. Danilov, 6 pp, (p 12).	
No 50, 8 Dec 1962, p 29. Why There Are no Khar'kov Electric Drills. Some Aspects of Production at the Khar'kov Electrical Machinery Plant, by N. Gubenkov, 8 pp.	JPRS 18616
No 51, 1962. Modernizing the Novomoskovsk Chemical Combine, by E. Kudryavtsev, 5 pp, (p 4).	JPRS 18114
How Industrial Output is Calculated, by I. Pogosov, 10 pp, (pp 5-7).	JPRS 18646

Selected Articles From the Russian Newspaper Ekon Gazeta. (Contd)

ton dazeta. (conta)	
No 51, 1962. Construction Projects and Cost Estimates, by I. Stomakhin, 11 pp, (pp 8-11).	JPRS 18646
The Turnover Capital of Railroad Transport, by F. Fleyshman, 18 pp, (pp 11-14).	JPRS 18646
No 1, 5 Jan 1963, pp 26-35. Vital Problems of the Economy and Organization of Agricultural Production, 50 pp.	JPRS 18376
No 2, 12 Jan 1963. Expand the Chemical Industry in 1963, 5 pp, (p 2).	JPRS 18645
Increase Output at the Nizhniy Tagil Plastics Plant, by Ye. Vlaskin, 5 pp, (p 3).	JPRS 18645
New Sovkhozes in the Lithuanian SSR and the Problem of Their Profitable Management, by V. Ilyushin, 5 pp, (pp 32, 33).	JPRS 18389
Specialization Promotes Profitability of New Sovkhozes, by N. Isayenko, 7 pp, (p 33).	JPRS 18389
New Sovkhozes in Rostovskaya Oblast Are Lagging, by G. Savitskiy, 5 pp, (p 34).	JPRS 18389
Comparison of a Successful and a Lagging Sovkhoz, by A. Sormyazhko, V. Tarasevich, 9 np, (np 34, 35).	JPRS 18389
Study of Economic Structures of New Sovkhozes in Detail, by A. Chuvashayev, 8 pp, (p 36).	JPRS 18389
No 4, 26 Jan 1963, p 2. The Chief Concern of Party Committees, 6 pp.	JPRS 18196
No 5, 1963, p 16. Consumer Demand Problems, by G. Trakhtenberg, 5 pp.	JPRS 18334
No 6, 1963, p 2. Make Better Use of the Equipment, 6 pp.	JPRS 18287

Selected Articles From the Russian Newspaper Ekon Gazeta. (Contd)

ACON GAZETA. (Conta)	
No 7, 16 Feb 1963. The Economic Evaluation of Specialization, by G. Samborskiy, 10 pp, (p 3).	JPRS 18238
The Effectiveness of Production Concentration, by Ye. Slastenko, 6 pp, (p 4).	
No 8, 1963. Fixed Capital of Light Industry Enterprises, by M. Nazarov, 9 pp, (pp 13-15).	JPRS 18353
Working Capital of Light Industry Enterprises, by D. Manzheyov, 8 pp, (pp 16-18).	JPRS 18353
The Problem of Labor Turnover, 8 pp, (pp 32, 33).	JPRS 18286
No 11, 16 Mar 1963, pp 10, 11. The Work of Top-Level Supervision and Management, by L. Rogovoy, 6 pp.	JPRS 18746
Use of Mathematical Methods in Establishing an Effective Variant of Capital Investments, by V. Beshenkovskiy, 47 pp.	
RUSSIAN, per, Ekon Nauki, No 6, 1962, pp 49-65,	JPRS 18132
Tasks Outlined for 1963 The Fifth Year of the Seven-Year Plan, 7 pp. RUSSIAN, per, Elektricheskiye Stantsii, No 1, 1963,	
pp 2-6.	JPRS 18357
The Prospects for the Construction of Powerful City TETS for Supercritical Steam Parameters Following the Example of Moscow in the Order of Discussion, by G. I. Rossiyevskiy, A. R. Monastyrskaya, 11 pp. RUSSIAN, per, Elektricheskiye Stantsii, No 1, 1963, pp 13-17.	JPRS 18357
Power Machine-Building Problems in Light of the Decisions of the CPSU Central Committee November Plenum, 12 pp.	
RUSSIAN, per, Energomashinostroyeniye, Vol IX, No 1, 1963, pp 1, 2.	JPRS 18133
The Effective Utilization of Capital Investments, 7 pp.	
RUSSIAN, per, Finansy SSSR, No 12, 1962, pp 10-13.	JPRS 18132

The Level of Control by Institutions of Stroybank Must Be Sharply Raised, by G. Karavayev, 21 pp. RUSSIAN, per, Finansy SSSR, No 12, 1962, pp 14-25.

JPRS 18287

Results of the First Four Years of the Seven-Year Plan and Objectives Before the Ore Mining Industry, by P. Ye. Sledzyuk, 12 pp.
RUSSIAN, per, Gornyy Zhur, No 1, 1963, pp 3-8.

JPRS 18725

Price Disparities in Agricultural Machinery, by S. Karpenko, 5 pp. RUSSIAN, np, Izvestiya, 11 Jan 1963.

JPRS 18316

The Soviet Iron Ore Industry From 1959 to 1962, by L. M. Feygin, 8 pp.
RUSSIAN, per, Gornyy Zhur, No 1, 1963, pp 8-15.

JPRS 18725

Certain Problems in the Carbothermic Reduction of Niobium Pentoxide, by P. V. Gel'd, G. P. Shveykin, 12 pp.
RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Tekh Nauk, Netallurg i Toplivo, No 1, 1959, pp 44-49.

JPRS 18287

Certain Problems of Planned Urban Structure, by Yu. P. Bocharov, 12 pp. RUSSIAN, per, Iz Ak Stroitol'stva i Arkhitektury SSSR, 60 2, 1962, pp. 12-15. (Call No. 1941985)

Army Man Service

Soviet Orders Broad Construction Program of Oxygen Converter Shops at Metallurgical Enterprises, by E. Turkebayev, G. Bardagov, 6 pp. RUSSIAN, np, Kazakh Pravda, 8 Dec 1962, p 1.

JPRS 18146

Selected Articles From the Russian Periodical Khim Mashinostroyeniye.

No 1, 1963.

JPRS 18289

Improving the Application of Scientific-Research and Design Resources in Chemical Machine-Building, 9 pp, (pp 1, 2).

Modernization of Equipment as a Means for Raising the Output of Chemicals, by M. D. Mazo, 12 pp, (pp 3-5).

Prospects for Developing New Steels for Use in the Chemical Industry, by M. B. Shapiro, A. L. Belinkiy, 17 pp, (pp 28-31).

The Worm Devulcanizer 320, by Yu. P. Vertebnyy, 5 pp, (pp 41).

Various New Chemical Machines, Apparatus and Equipment, 13 pp, (pp 43-45).

Prospects for the Growth of the Production and Utilization of Chemical Fibers, by G. Ye. Birger, Ye. P. Ivanovna, et al, 12 pp. RUSSIAN, per, Khim Volokna, No 6, Dec 1962, pp 2-6.	JPRS 18114
Methods for Further Developing Scientific-Technical Cooperation in the Council for Economic Mutual Assistance, by D. Gvishiani, 11 pp. RUSSIAN, per, Kommunist, No 14, Sep 1962, pp 73-80.	JPRS 18337
Delayed Opening of the Agrak Copper-Molybdenum Combine Hinders Industry, by A. Shkulov, 6 pp. RUSSIAN, np. Kommunist, 21 Dec 1962.	JPRS 18412
Disposition of Productive Forces, by N. Nekrasov, 56 pp. RUSSIAN, pex, Kommunist, No 2, 1963, pp 25-36.	JPRS 18594
Role of the Economist in the Factory and in the Economic Council, by V. Lagutkin, 29 pp. RUSSIAN, per, Kommunist, No 3, 1963, pp 37-45.	JPRS 18594
The Scientific-Technical Conference on the Experience of Designing and Operation of Automatic Lines of the Forging-Stamping Industry, by S. L. Zlotnikov, 5 pp. RUSSIAN, per, Kuznechno-Shtampovochnoye Proizvodstvo, No 1, 1963, pp 48, 49.	JPRS 18301
Crash Program at the Kirov Tractor Plant, by I. Isayav, 7 pm. RUSSIAN, np, Loningrad Pravda, 22 Dec 1962, p 1.	JPRS 18316
Construction Deadlines at the Nizhnednepropetrovsk Machine Building Plant imeni Artem Grossly Violated, by D. Pisarev, 5 pp. RUSSIAN, np, Lesnaya Prom, 28 Feb 1963, p 3.	JPRS 18496
Scientific and Technical Information and Propaganda as an Aid to the Mechanization and Automation of Production, by I. I. Romanov, 10 pp. RUSSIAN, per, Mekh i Avtomat, Vol XVI, No 6, 1962, pp 43-45.	NLL Tr Bulletin Vol V No 1 1963
Exploiting the Potential at the Dneprospetsstal' Plant, by B. Sergeyev, 5 pp. RUSSIAN, per, Metallurg, No 12, 1962, pp 29, 30.	JPRS 18184
Unified Technical Policy in the Foundry Industry Urged to Eliminate Shortages in Castings, by R. Ampilogov, 7 pp. RUSSIAN, np, Moskov Pravda, 7 Dec 1962, p 2.	JPRS 18146

Construction of Chemical Installations in Salavat at Accelerated Pace, by V. Marushkin, 6 pp. RUSSIAN, per, Na Stroykakh Rossii, No 11, 1962, JPRS 17864 pp 27, 28. Collapse of 1-447S Houses and Its Causes, by A. Shishkin, 6 pp. RUSSIAN, per, Na Stroykakh Rossii, 1962, pp 31, 32. Army Han Service (Call No. TA4 NII) Building Caprolactam Shops at the Kemerovo Combine, by D. Kutovoy, 5 pp. RUSSIAN, per, Na Stroykakh Rossii, No 12, 1962, JPRS 18064 pp 10, 11. Revision Required in Railroad Regulations, by I. Polishchuk, I. Yakubovich, 9 pp. RUSSIAN, per, Narod Khoz Kazakh, No 9, 1962, pp 61-65. JPRS 18599 Economic Conferences Result in Higher Labor Productivity and Better Operating Efficiency, by A. Vdovin, 8 pp. RUSSIAN, per, Narodnove Khozyaystvo Kazakh, JPRS 18412 No 10, 1962, pp 9-12. Production and Improper Planning at the Irtyshskiy Polymetallic Combine, by N. Payzulin, 6 pp. KUSSIAN, per, Narod Khozyaystvo Kazakh, JPRS 18412 No 10, 1962, pp 17-20. Turgayalyumin'stroy Continues to Lag Behind, by V. Goncharov, 6 pp. RUSSIAN, per, Narod Khozyaystvo Kazakhstana, No 10, JPRS 18412 1902, pp 61-63. Poor Management in Industry, by R. Bayseitov, 12 pp. JPRS 18594 RUSSIAN, per, Narod Khoz Kazakh, No 12, 1962, pp 16-19. Kazakhstan Building Materials Shortages, by N. Dubinskiy, V. Sokolov, 10 pp. RUSSIAN, per, Narod Khoz Kazakh, No 12, 1962, JPRS 18594 pp 36-38. Consumers! Demand -- The Barometer of the Soviet Trade, by A. Sarymsakov, 7 pp. RUSSIAN, per, Narod Khoz Uzbek, No 12, 1962, pp 73-76. JPRS 18334 Scientific-Technical Societies Holp Advance Ferrous Metallurgy, by M. Borodavkin, 6 pp.

JPRS 18725

RUSSIAN, per, Nauch-Tekh Obshch SSSR, No 12,

1962, pp 21-24.

	
Design and Development Work at the Tula Metallurgical Combine, by M. Gerlov, 8 pp. RUSSIAN, per, Partiynaya Zhizn', No 24, 1962, pp 16-20.	JPRS 18294
Chemical Agents for the Development and Increased Productivity of Agriculture, by N. Fedorenko, 12 pp. RUSSIAN, per, Partiynaya Zhizn', No 24, 1962, pp 34-40.	JPRS 18376
Lagging Construction of the Polyethylene Plant in Gur'yev, by I. Sverbikhin, 6 pp. RUSSIAN, per, Partiynaya Zhizn' Kazakhstana, No 9, 1962, pp 52-54.	JPRS 17982
Solected Articles From the Russian Periodical Plan Khoz.	
No 12, 1962, pp 44-49. Improvements Needed in Transport-Economic Associations, by L. Kats, 12 pp.	JPRS 18599
No 1, 1963, pp 81-87. The Potential for Increasing the Production of Sheet Glass and Reducing Its Production Cost, by L. Ligacheva, 12 pp.	JPRS 18149
No 2, 1963. Methods for Increasing Changeover in Machine- Construction, by A. Skuba, 11 pp, (pp 1-7).	JPRS 18132
Labor Evaluation and the Scope of National- Economic Planning, by I. Doroshin, 17 pp, (pp 8-19).	JPRS 18132
The Role of Below-Limit Capital Investments in Construction, by L. Beregovoy, J. Rakhmanina, et al, 13 pp, (pp 51-58).	JPRS 18196
Improve the Design of Chemical-Industry Projects in Kuybyshevskaya Oblast, by V. Muravlenko, 5 pp. RUSSIAN, np, Pravda, 13 Jan 1963.	JPRS 18645
Problems of Fishing Industry Development, by A. Ishkov, 5 pp. RUSSIAN, np. <u>Pravda</u> , 28 Jan 1963, p 2.	JPRS 18150
Present and Future Development of the Microrayon, by S. Tutuchenko, 5 pp. RUSSIAN, np, Pravda Ukrainy, 19 Sep 1962, p 3.	JPRS 18498

Ukase of the Presidium of the Supreme Soviet Uzbek SSR on Consolidation of Rayons in the Uzbek SSR, 6 pp. RUSSIAN, np. Pravda Vostoka, 25 Dec 1962, p 1.	JPRS 18170
New Equipment for Spoil Dumping Operations at the Kadzharan Pit, by G. Grigoryan, 10 pp. RUSSIAN, per, Prom Armenii, No 10, 1962, pp 25-29.	JPRS 18220
Network as Practiced at the Kadzharan Copper- Nolybedenum Stockwork, by Ye. Zil'man, 9 pp. RUSSIAN, per, Prom Armenii, No 10, 1962, pp. 45-47.	JPRS 18220
Permissible Loads for Service Conductors and Cables, by G. Arzumanyan, Yu. Kabalaliyev, 7 pp. RUSSIAN, per, Prom Armenii, No 11, 1962, pp 58-60.	JPRS 18268
Experience in the Reconstruction of Chemical Industry Enterprises, by V. Ye. Khachikyan, 5 pp. RUSSIAN, per, Prom Stroitel, No 11, 1962, pp 31-34.	JPRS 18192
Installation of Building Structures of an Open- Hearth Shop Complex, by V. Golovkin, D. Balinskiy, 9 pp. RUSSIAN, per, Prom Stroitel i Inzhenernyye Sooruzheniya, Ro 6, 1962, pp. 11-15.	JPRS 18294
Preparatory Work for the Installation of Structures of a Ball-Bearing Pipe Shop, by Ye. Karuna, 7 pp. RUSSIAN, per, Prom Stroitel i Inzhenernyye Sooruzheniya, No 6, 1902, pp 24-27.	JPRS 18294
Importance of Labor Productivity, by H. Nazarov, 7 pp. RUSSIAN, per, Rechmoy Transport, No 2, 1965, pp 1-5.	JPRS 18746
Millions of Rubies Lost by the Ministry of Trade, by V. Pakhonov, L. Chekalov, 6 pp. RUSSIAN, np, Rossiya, 27 Jan 1963, p 2.	JPRS 18334
Acceleration of Machine Building for Full Mechanization of Beet Cultivation and Harvesting, 5 pp. RUSSIAN, np, Sel'skaya Zhizn', 7 Feb 1963, p 1.	JPRS 18384
Spare Parts Supply Difficulties, by B. Bazhanov, 6 pp. RUSSIAN, np, Sel'skaya Zhizn', 14 Feb 1963, p 1.	JPRS 18336
Specialization and Concentration in the Plastics Industry, by N. Fedorenko, 13 pp. RUSSIAN, per, Sotsialist Trud, Jan 1963, pp 48-53.	JPRS 18598

Beoliomite (contu)	
Qualified and Independent Inspection Service Key to Increase in Quality at Minsk Watch Factory, by P. Tkachuk, 8 pp. RUSSIAN, np, Sovet Belorussiya, 14 Oct 1962, p 2.	JPRS 1864 3
For Greater Production From the Haardu Chemical Combine, by Kh. Peremeyes, 5 pp. RUSSIAN, np. <u>Sovet Estoniya</u> , 18 Nov 1962.	JPRS 18192
Vehicles on Air Cushions, by L. Gil'borg, 5 pp. RUSSIAN, np. Sovet Litva, 5 Feb 1963, p 3.	JPRS 18361
Improvements in the Planning of the Wholesale Turnover of Merchandise, by A. Markov, 5 pp. RUSSIAN, np. Sovet Torgovlya, 19 Jan 1963, p 2.	JPRS 18334
Wholesale Trade in Fabrics, by I. Tariverdiyev, N. Yakhnina, 7 pp. RUSSIAN, np, Sovet Torgovlya, No 1, 1963, pp 5-8.	JPRS 18354
At the Institute for the Design and Planning of the Plastics Industry, by V. Popov, 5 pp. RUSSIAN, np., Stroitel Gazeta, 21 Dec 1962.	JPRS 18114
Expedite the Construction of Chemical Enterprises in Yaroslavi, by L. Levina, 5 pp. RUSSIAN, np. Stroitel Gazeta, 23 Jan 1963.	JPRS 18645
Contralization of Engineering Management in Construction and Road Machinery Building, 8 pp. RUSSIAN, per, Stroitel i Dorozhnyye Mashiny, No 1, 1963, pp 1, 2.	JPRS 18243
Universal Dry-Cargo Vessels With a Deadweight Tonnage of 7000 and 12,000 Tons, by B. K. Sidorov, 16 pp.	
RUSSIAN, per, Sudostroyeniye, No 11, 1962, pp 1-8.	JFRS 18599
Demands of Amateur Motion Picture Organizations Upon Industry, by A. S. Tikhomirov, 10 pp. RUSSIAN, per, <u>Tekhnika Kino i Televideniya</u> , No 1, 1963, pp 66-68.	JPRS 18375
Improving the Quality of Cameras and Equipment for the Moving Picture Setwork, 12 pp. RUSSIAN, per, Tekhnika Kino i Televideniya, No 1, 1963, pp 92-94.	JPRS 183 7 5
Textile Industry in 1963, by N. Ye. Chesnokov, 5 pp. RUSSIAN, per, Tektekstil'naya Promyshlennost', No 12, 1962, pp 1-3.	JPRS 18334

USSR

Economic (Contd)

Tractor and Agricultural Machine Building, in 1963, by I. N. Yes'kov, 9 pp. RUSSIAN, per, Traktory i Sel'khozmashiny, No 1, 1963, JPRS 18384 pp 1, 2. Lagging Construction of Synthetic Rubber and Tire Plants in Omsk, by V. Vernikov, 5 pp. RUSSIAN, np, Trud, 31 Oct 1962. JPRS 17982 Failure to Support Production of Air Conditioners at the Khar'kov Plant, by V. Rodionov, 6 pp. RUSSIAN, np, Trud, 30 Nov 1962, p 1. JPRS 18029 Overall Analysis and Problems of Classification and Analysis of Reserves, by G. Prudenskiy, 12 pp. RUSSIAN, per, Trud i Zarabotnaya Plata: Byulleten' Nauchnoy Informatsii, No 11, 1962, pp 19-25. JPRS 18157 Exploit the Potential for Increasing Cement Production, 7 pp. RUSSIAN, per, Tsement, No 6, Nov-Dec 1962, pp 1, 2. JPRS 18149 Serious Deficiency of Mechanized Accounting in Agriculture, by S. P. Kutsenko, 7 pp. RUSSIAN, per, Uchet i Finansy v Kolkhozakh i Sovkhozakh, No 11, 1962, pp 5-9. JPRS 18376 Selected Articles From the Russian Periodical Vest Elektroprom. No 12, 1962. JPRS 18268 Production of Large-Unit Electrical Equipment Hust be Expanded, by L. B. Slavnyy, 6 pp. (pp 1-3).New Equipment From the Minsk Electrotechnical Plant, by P. P. Goydenko, 6 pp, (pp 4-9). JPRS 18268 Two-Speed Vertical Squirrel-Cage Motors for Pumps, by Z. B. Neyman, 5 pp, (pp 40-42). JPRS 18268 No 1, 1963. JPRS 18167 Centralization of Technical Policy Management in Electrical Industry, 6 pp, (pp 1-3). Tasks of Low-Voltage Apparatus Construction, by N. A. Dodogorskiy, C pp, (pp 4, 5).

Awards to the Participants of the Exhibition of Achievements of the National Economy of the USSR, by M. A. Borisov, V. I. Smorgonskiy, 11 pp, (pp 36-58).

USSR

Beonomie (Contd)

The Material and Technical Base of Kolkhozes During the Period of Extensive Building of Communism, by S. N. Soskin, 13 pp. RUSSIAN, per, Vest Sel'skokhoz Nauk, No 8, 1962, pp 8-16.

JPRS 18389

Selected Articles From the Russian Periodical Vest Statistiki.

No 11, 1962, pp 38-44. Statistical Indicators of the Intensification of Agriculture, by A. Libkind, 11 pp. JPRS 18376

No 12, 1962. Training of Specialists at the Moscow Economics and Statistics Institute, by N. Koborov, 15 pp, (pp 51-59).

JPRS 18287

How to Compute Production in Sewing Industry Enterprises, by G. Savikina, 10 pp, (pp 59-63).

JPRS 18274

No 1, 1963, pp 4-16. On the Results of Fulfilling the State Plan for the Development of the National Economy of the USSR in 1962, 30 pp. JPRS 18584

The Technical and Economic Efficiency of Various Methods of Combining AC and DC Electric Traction, by A. V. Izosimov, V. B. Lapin, 11 pp. RUSSIAN, per, Vest Vses Nauch Isseldovatel Instituta Zheleznodorozhnogo Transporta, No 7, 1962, pp 3-7.

JPRS 18599

An Agreement on the Organization of a Central Control Administration for Integrated Power Systems in the People's Republic of Bulgaria, The Hungarian People's Republic, The German Democratic Republic, The Polish People's Republic, The Rumanian People's Republic, The Czechoslovakian Socialist Republic, and The Western Ukrainian Power System of the Union of Soviet Socialist Republics, 6 pp.
RUSSIAN, per, Vneshnyaya Torgovlya, No 1, 1963, pp 44-46.

JPRS 18197

General Conditions for Installation and Instructions for Other Technical Services Related to Mutual Deliveries of Machinery and Equipment Between the Foreign Trade Organizations of the Member Nations of the Council for Economic Mutual Assistance, 17 pp. RUSSIAN, per, Vneshnyaya Torgovlya, No 1, 1963, pp 46-51.

JPRS 18197

G1.G29)

Selected Articles From the Russian Periodical Voprosy Ekonomiki.

No 10, 1957, pp 65-73. JPRS 18520 Economic Effectiveness of Capital Investment in Irrigation Construction, by A. Ovchinnikov, 12 pp. No 12, 1962, pp 94-110. JPRS 18196 Scientific Planning and a Rational System of Economic Information, by N. Kovalev, 24 pp. No 1, 1963. Raising Labor Productivity in the Chemical Industry, by N. Fedorenko, 9 pp, (pp 10-16). JPRS 18286 The Size of Industrial Enterprises and Labor Productivity, by P. Khromov, 18 pp, (pp 29-39). JPRS 18310 The Industrialization of Construction, by E. Kudryavtsov, 7 pp. RUSSIAN, per, Zaochnyye Ekon Kursy, No 1, 1963, pp 7-10. JPRS 18149 Shipment of More Freight Meeded for Each Ruble of Basic Funds, by V. Ye. Biryukov, 15 pp. RUSSIAN, per, Zheleznodorozhnyy Transport, No 12, 1962, pp 20-25. JPRG 18599 The Organization of Snow Control on the Kuybyshev Road, by A. S. Andriyanov, 9 pp. RUSSIAN, per, Zheleznodorozhnyy Transport, No 12, 1962, pp 51-53. JPRS 18599 The Role of Profits in Strengthening the Self-Support of Railroad Divisions, by Ye. V. Larionova, 9 pp. RUSSIAM, per, Zheleznodorozhnyy Transport, No 12, 1962, pp 54-58. JPRS 18599 The Present State and Perspectives of the USSR Metallurgy, by Anna Tsvetkova, 7 pp. BULGARIAN, per, Geografiya, Nauchno-Populyarno

Army Man Service

Spisanie, Vol XII, No 8, 1962, pp 11-15, (Call No.

USSR Political

Scientific and Technical Progress and the Building of a Material and Technical Base for Communism, by V. Kamayev, 11 pp. RUSSIAN, per, Ekon Nauki, No 5, 1962, pp 3-10.	JPRS 18265
Ukase of the Presidium of the Supreme Soviet Kazakh SSR on Electoral Districts for Elections to the Supreme Soviet Kazakh SSR, 29 pp. RUSSIAN, np. Kazakh Pravda, 12 Jan 1963, pp 2-4.	JPRS 18355
Ukase of the Presidium of the Kazakh Supreme Soviet on Election Districts for Elections to the Kazakh Supreme Soviot, 31 pp. RUSSIAN, np. Kazakh Pravda, 13 Jan 1963, pp 1-4.	JPRS 18314
Leningrad Pre-Election Speech, by F. R. Kozlov, 25 pp. RUSSIAN, np, Leningrad Pravda, 27 Feb 1963, pp 1-3.	JPRS 18521
Marxist Sociology and Its Sociological Research, by G. V. Usipov, V. V. Kolbanovskiy, 16 pp. RUSSIAN, per, Nauch Dok Vysshey Shkoly, Filosof Nauk, No 5, 1962, pp 21-32.	JPRS 18341
Second Birth, by M. Lavrik. RUSSIAN, per, Ogonek, No 52, 1962, pp 24, 25.	*ACSI I-2235 ID 2227673 S19th MI Bn
Pravda Reviews Brest Peace Treaty of 1918 and the Seventh Party Congress, by V. Zaytsev, 8 pp. RUSSIAN, np, Pravda, 7 Mar 1963, pp 2, 3.	JPRS 18304
Ukase of the Presidium of the Uzbek Supreme Soviet on Election Districts for Elections to the Uzbek Supreme Soviet, 42 pp. RUSSIAN, np, Pravda Vostoka, 16 Jan 1962, pp 1-4.	JPRS 18270
Roots and Ramifications of Stalinism, 16 pp. FRENCH, per, Unir Pour 1e Socialismo, No 123, 1eb 1963, pp 6-11.	JPRS 18143

USSR Political (Contd)

Soviet Literature in the Post-Stalin Era, by Wolfgang Leonhard, 17 pp.
GERMAN, np. Die Zeit, 29 Mar 1963, pp 11, 12.

JPRS 18665

Marxist Thought and Activity, by Jan Jaroslawski, 13 pp.
POLISH, per, Nowe Drogi, No 3, 1963, pp 34-43.

JPRS 18452

Military

Methods of Research in Military Science, by P. A. Kurochkin, 39 pp. RUSSIAN. bk. Metodika Voyenno-Nauchnogo Issledovaniya. Moscow, 1957, pp 3-32.

JPRS 18716

Missiles and the Problem of Antimissiles, by M. N. Goncharenko. (DC-8554) RUSSIAN, bk, Rakety i Problema Antiraket, Moscow, 1962, pp 1-260.

*JPRS

Tank Fire, by L. M. Gusyev, N. N. Shramov. RUSSIAN, bk, <u>Tank Fire</u>, Moscow, 1961, 105 pp.

Army Materiel Command FLRS-1262-11

An Incident from the German Attack on the Soviet Union, by Sergey Mart'yanov, 6 pp. RUSSIAN, np, Kazakh Pravda, 28 Oct 1962, p 4.

JPRS 18281

Selected Articles From the Russian Periodical Kommunist Vooruzhennykh Sil.

No 2, 1963, pp 24-33. Causes and Special Characteristics of Modern Wars, by R. Rotmistrov, 14 pp. JPRS 18717

No 3, 1963, pp 20-30. Scientific and Technical Progress and Its Influence on Military Developments, by S. Shtemenko, 14 pp. JPRS 18717

No 4, Feb 1963, pp 83-85. Correspondence Course Training of Military Personnel. *ACSI I-2435 ID 2232452

No 5, 1963, pp 9-17. Role of the Masses and the Individual in Modern War, by M. Skirdo, 11 pp. JPRS 18717

USSR Military (Contd)

Strategy, Rockets, and Cosmics. RUSSIAN, np, Krasnaya Zvezda, 19 Jan 1963. *ACSI I-2355 ID 2229426

Review of the Forces of Parachutists, by G. Pyasetskaya, 11 pp.
RUSSIAN, per, Kryl'ya Rodiny, No 10, 1961, pp 9-11. 9680144

FTD-TT-62-1700

Amphibous Vehicle, by A. Dozorov.
RUSSIAN, per, Starshina-Serzhant, No 2, 1963, p 17.

*ACSI I-2451-A ID 2229451 319th MI Bn

Nuclear Weapons and Tanks, by A. Kuptil'. RUSSIAN, per, Starshina-Serzhant, No 2, 1963. p 32.

*ACSI I-2451-B ID 2229451 319th MI Bn

Geographic

A Guide to the Latvian Health Resort of Baldone, by I. Blaus, 41 pp.
RUSSIAN, bk, Baldone, Riga, 1962, pp 1-90.

JPRS 18198

Irkutsk, by V. I. Fridman. RUSSIAN, bk, Irkutsk, 1961, pp 1-86.

JPRS 18476

Tbilisi, Briof Information for Tourist, by G. Gogia. (NY-7589) RUSSIAN, bk, <u>Kratkiye Svedeniya dlya Turista</u>, 1962, pp 28-132.

*JPRS

Maloyaroslavets City Progress, by V. Bespalov, A. Dmitriyev, 18 pp.
RUSSIAN, bk, Maloyaroslavets, Kaluga, 1962, pp 175-215.

JPRS 18159

Kiev, Guide for 1962, by Ivan Alexand Ignatkin, Nikolay N. Lysenko, et al. (SF-2611) RUSSIAN, bk, Putevoditel'-Spravochnik, Kiev, 1962, pp 27-42, 47-55, 62-138, 141, 143, 146-148, 151-154, 157, 158, 160, 165, 169, 174, 177, 185, 246-248, 252-258, 260-262, 267, 276, 278, 279, 281-284, 286-296, 298, 299, 303-350.

*JPRS

Guide Book on Boardinghouses and Compsites for the Motor Tourist, by A. I. Burov, 65 pp. RUSSIAN, bk, Spravochnik-Putevoditel' po Pansionatam i Kempingam dlya Avtoturistov, Moscow, 1961, pp 3-104.

JPRS 18360

USSR Geographic (Contd)

Western Yakutiya (Economical and Geographical Characteristics), by G. V. Naumov, 10 pp. RUSSIAN, per, <u>Izdatel'stvo Ak Nauk SSSR</u>, 1962, pp 8, 10, 35-37, 77, 81, 86.

JPRS 18412

Experiment in Geomorphological Zoning of Northeastern Siberia, by Yu. P. Baranova, S. F. Biske, 37 pp.
RUSSIAN, per, Sibirskiy Geografiz Sbornik, No 1, 1963. (Call No. GB239 S5S56)

Army Map Sorvice

Guide Book of Tallin, by A. Reinsalu. Estonian, bk, 1962.

*ACSI I-2371 ID 2229427

Sociological

Criminological Analysis of Documents, by S. A. Golunskiy, 39 pp. RUSSIAN, bk, Kriminalistika, Moscow, 1959, pp 3, 149-184.

JPRS 18555

International Geophysical Year Bibliography of Literature Published in Russian in 1960, by R. F. Zatrutina, L. S. Rubina, 189 pp. RUSSIAN, bk, Mozhdunarodnyy Geofizicheskiy god Bibliograficheskiy Ukazatel Literatury na Russkom Yazyka za 1960 g, Moscow, 1961, 128 pp.

NASA TT F-109

Compilation of the Most Important Official Data on the Problems of Labor Hygiene and Industrial Sanitation, by L. V. Yanina. RUSSIAN, bk, Sbornik Vazhneishikh Ofitsial nykh Materialov po Voprosam Gigieny Trudy i Proizvodstvennoi Sanitariy, 1962, 220 pp.

*AEC

Catalogue of USSR Institutions of Higher Education, 364 pp.
RUSSIAN, bk, Spravochnik dlya Postupayushchikh v
Vysshiye Uchebnyye Zavediniya SSSR V 1962 g,
Moscow, 1962, pp 31-139.

JPRS 1808C

USSR Sociological (Contd)

With the Blessings of the Vatican, by V. Nyunka, 8 pp. RUSSIAN, per, <u>Kommunist</u> , No 11, 1962, pp 37-42.	JPRS 18214
Catholic Church Versus Man's Problems, by I. Kichanova, 8 pp. RUSSIAN, per, <u>Nauka i Religiya</u> , No 1, 1963, pp 33-36.	JPRS 18214
Under Pressure of Demands of Life, by P. Kolonitskiy, 7 pp. RUSSIAN, per, Nauka i Religiya, No 1, 1963, pp 37-40.	JPRS 18214
On Debates and Literary Courts, by Artem Borzenko, 6 pp. RUSSIAN, per, Nauka i Religiya, No 1, 1963, pp 70-72.	JPRS 18214
Foreign Pro-Diploma Probationary Work of Students, by S. Kholyavko, 6 pp. RUSSIAN, per, Vestnik Moskovskogo Universiteta, No 1, 1963, pp 74-76.	JPRS 18185
Some Data on the Birth Rate in the USSR, by A. Vostrikova, 9 pp. RUSSIAN, por, Vestnik Statistiki, No 12, 1962, pp 42-46.	JPRS 18132

EASTERN EUROPE

Economic

The Construction of Stores in Bulgaria, by Tsvetan Kolandzhiev, 10 pp. BULGARIAN, per, Arkhitektura, Vol IX, No 8, JPRS 18246 1962, pp 9, 10. Tobacco Production in 1963, 6 pp. BULGARIAN, per, Bulgarski Tyutyun, No 1, JPRS 18269 1963, pp 1, 2. Methods of Determining the Efficiency of Capital Investments Related to Foreign Trade, by Pavel Glikman, 19 pp. BULGARIAN, per, Ikonomicheska Misul, Vol VII, No 9, 1962, pp 86-101. JPRS 18136 Perfecting the Future Planning of Electrification, by Potur Shapkarev, 24 pp. BULGARIAN, per, Ikonomicheska Misul, No 10, JPRS 18142 Dec 1962, pp 37-54. Economic Progress in the Canning Industry Throughout the Years of the Three Five-Year Plans -- A Pledge to Fulfill the Fourth Five-Year Plan, by Stephan Balkanski, 13 pp. BULGARIAN, per, Khranitelna Promishlenost, JPRS 18222 No 11, 12, 1962, pp 7-12. The Key to the Solution of the Cereal Problem, by Vasil Markov, 7 pp. BULGARIAN, per, Kooperativno Zemedelie, No 1, 1963, pp 3, 4. JPRS 18222 The First Year of the Academy of Agricultural Sciences, 11 pp. BULGARIAM, per, Literaturen Front, Vol XXI, JPRS 18269 No 8, 21 Feb 1963, pp 1, 4. Selected Articles From the Bulgarian Periodical Naruchnik Na Agitatora. Nov 1962, pp 3-9. JPRS 18269 The Significance of Personal Farms of Cooperative Members, 8 pp.

JPRS 18554

Dec 1962, pp 3-13.

Organizational-Technical Measures Related

to the 1963 Economic Plan, 7 pp.

Eastern Europe Economic (Contd)

Selected Articles From the Bulgarian Periodical Naruchnik Na Agitatora. (Contd)

Maruchila Na Agitatora. (Conta)	
No 4, 1963. Economic Results Achieved in Bulgaria During 1962, 5 pp, (pp 3-11).	JPRS 18422
Bonuses in Cooperative Farms as a Material Incentive, 9 pp, (pp 18-26).	JPRS 18059
New Work Horms for Cooperators Working in Motor Transport, by Vurban Tsvetkov, 11 pp. BULGARIAN, per, Otchetnost i Kontrol v Selskoto Stopanstvo, Vol VII, No 12, 1962, pp 564-569.	JPRS 18437
Planning Liquid Assets in the Cooperative Farms TSZS's, by Geno Dobrev, 6 pp. BULGARIAN, per, Otchetnosti i Kontrol v Selskoto Stopanstvo, Vol VII, No 12, 1962, pp 570-572.	JPRS 18437
Fulfillment of the 1963 Plan, 5 pp. BULGARIAN, per, Partien Zhivot, Dec 1962, pp 3-8.	JPRS 18122
The Stages in the Economic Development of Bulgaria up to 1980, by Zhak Aroyo, 7 pp. BULGARIAN, per, Partien Zhivot, Dec 1962, pp 24-31.	JPRS 18122
The Quality of Sugar Beets and Its Effect on Economic Indicators in the Sugar Factories, by Kamen Lukanov, 11 pp. BULGARIAN, per, Planovo Stopanstvo i Statistika, No 1, 1903, pp 31-42.	JPRS 18222
Some Problems Concerning the Economic Effectiveness of Capital Investments in Agriculture, by Stofan Paskalev, Khristo Tyurlesanov, 30 pp. BULGARIAN, per, Planovo Stopanstvo i Statistika, Vol XVIII, No 2, 1963, pp 3-14.	JPRS 18367
Remuneration of Management Personnel in Cooperative Labor Farms, by Natasha Misheva, 32 pp. BULGARIAN, per, Planovo Stopanstvo i Statistika, Vol XVIII, No 2, 1963, pp 39-50.	JPRS 18437
Standardization in Bulgarian, by G. Papazov, 6 pp.	
BULGARIAN, per, katsionalizatsiya i Standartiza- tsiya, No 11, 1962, pp 28-30.	JPRS 18199

Eastern Europe Economic (Contd)

The Role of Scientific Research Institutes in Standardization, by Petur Nikolov, 7 pp. BULGARIAN, per, Ratsionalizatsiya i Standartizatsiya, No 11, 1962, pp 31-34.

JPRS 18199

Basic Tasks in the Fishing Economy in 1963, by Georgi Vrubchev, 6 pp. BULCARIAN, per, Ribno Stopanstvo, No 1, 1963, pp 2, 3.

JPRS 18269

The Third Session of the Joint Soviet, Bulgarian, and Rumanian, Commission on Fishing in the Black Sea, by Georgi Vrubchev, 7 pp. BULGARIAN, por, Ribno Stopanstvo, No 1, 1963, pp 4-6.

JPRS 18269

Some Basic Questions of Roducing the Cost of Tractor Jobs, by Petur Penev, 13 pp. BULGARIAN, per, Schetovodstvo i Kontrol, No 9, 1962, pp 24-30.

JPRS 18437

Some Problems of Intensification in Agriculture, by Khristo Daskalov, 13 pp. BULGARIAN, per, Selskostopanska Nauka, Vol I (7), No 11, 1962, pp. 1153-1158.

JPRS 18269

Fulfillment of the Veterinary Plan for Prophylaxis of Livestock in 1962, 10 pp. BULGARIAN, per, <u>Veterinarna Sbirka</u>, No 12, 1962, pp 1-4.

JPRS 18574

Selected Articles From the Bulgarian Periodical Vunshna Turgoviya.

Vol X, No 12, 1962, pp 13-17. Material Interestedness as a Factor in the Production of Goods for Export, by Mino Mitov, 9 pp.

JPRS 18431

No 1, 1963. Fulfillment of the 1963 Foreign-Trade Plan, 7 pp, (pp 1-4).

JPRS 18108

Trade Between Bulgaria and West Germany Under Common Market Conditions, by Dimitur Penev, 7 pp, (pp 12-15).

Invalidation of Foreign Trade Agreements, Including Those With Coma Countries, by Emil Silyanov, 10 pp, (pp 22-25).

Selected Articles From the Bulgarian Periodical Vunshna Turgoviya. (Contd)

·	
No 2, 1963, pp 1-5. A New Stage in the Foreign Currency and Financial Relations Between Cema Countries, by Nesho Tsarovski, 9 pp.	JPRS 18553
The Struggle to Fulfill the Railway Transport Plan in 1963, by Andon Penev, 11 pp. BULGARIAN, per, Zhelezoputen Transport, Vol XV, No 1, 1963, pp 1-4.	JPRS 18330
The Introduction of Express Diesel Locomotives, by Vasil P. Bakalov, 15 pp. BULGARIAN, per, Zhelozoputen Transport, Vol XV, No 1, 1963, pp 11-14.	JPRS 18330
Structure of Production, Marketing, and Consumption of Fruit in Yugoslavia and the World and Measures for Improvement, by Miroslav Milovankic, 24 pp. CROATIAN, per, Agronomski Glasnik, Vol XII, No 11, 12, 1962, pp 1172-1179.	JPRS 18222
Payment of Taxes by the Population in January-September 1962, by T. Stojanovic, 23 pp. CROATIAN, per, Finansije, No 8, 9, 1962, pp. 438-450.	JPRS 18422
The New Territorial Organization of Srezes and Opstinas in Bosnia-Hercegovina, by Ilija Materic, 6 pp. CROATIAN, per, Komuna, No 12, 1962, pp 6-8.	JPRS 18279
Applying a New Method of Economic Management in Czechoslovakia, by Zivorad Jevtic, 19 pp. CROATIAN, per, Medjunarodni Problemi, No 2, 3, Jun-Sep, pp 159-171.	JPRS 18136
The Effect of Economic Movements on Transport Work Volume, by Bosko Markovic, 10 pp. CROATIAN, per, Medjunarodni Transport, Vol VIII, No 12, 1962, pp 840-843.	JPRS 18147
The International Position of the New Belgarde Airport, by Batric Jovanovic, 6 pp. CROATIAN, per, Medjunarodni Transport, Vol VIII, No 12, 1962, pp 887-889.	JPRS 18147

No 1, 1963, pp 7, 8.

The Movement of Personal Incomes, by Slavko Gligorevic, 16 pp. CROATIAN, per, Narodna Uprava, No 11, 12, 1962, pp 468-476. JPRS 18234 Agricultural Electrification and Labor Productivity, by Vladimir Zlokovic, 12 pp. CROATIAN, per, Produktivnost, Vol IV, No 11, 1962, pp 679-684. JPRS 18222 The Organization and Work of the Customs Service, 8 pp. CROATIAN, per, Sluzbeni List Federativne Republike Jugoslavije, No 4, 30 Jan 1963, pp 61-63. JPRS 18553 The Increase in Fixed Assets in Yugoslavia in the Post-War Period, by Ivo Vinski, 16 pp. CROATIAN, per, Tekhnika, No 1, 1963, pp 17-23. JPRS 18234 The Problems in Enterprise Organization Related to Income Distribution Through the Use of Economic Units, by Rikard Stajner, CROATIAN, per, Technika, No 1, 1963, pp 182-188. JPRS 18234 Activation of Investments in 1962, by Milorad Tomic, 8 pp. CROATIAN, per, Vosnik Jugoslovenske Investicione Banke, No 71, 1962, pp 1-5. JPRS 18422 Programmed Effects of Investments in Industry and Mining in 1962-1964, by M. Savovic, 14 pp. CROATIAN, per, Vesnik Jugoslovenske Investicione Banke, No 71, 1962, pp 5-10. JPRS 18422 Better Use of State Aid to Foothill JZDs, by M. Dundr, 23 pp. CZECH, per, Ekonomika Zemedelstvi, Vol II, No 1, 1963, pp 3-7. JPRS 18269 Consolidation of JZDs and Concentration of Production, by Jiri Hubl, 13 pp. CZECII, per, Ekonomika Zemedelstvi, Vol II,

term reads are a recorded to reserving any or the second second

Selected Articles From the Czech Periodical Hospodarske Noviny.

No 39, 1962, pp 1-16. Wages and Bonuses, by Premysl Tomasek, Frantisek Nagy, 5 pp.	JPRS 18405
No 45, 9 Nov 1962, pp 4, 5. Soviet Discussion on Management and Economic Planning, by Karel Cipek, 16 pp.	JPRS 18312
No 47, 1962, pp 1, 4. Some Problems of Organization and Methods of Management, by Vladimir Horalek, 8 pp.	JPRS 18069
No 4, 1963. Measures on the Approval, Drafting and Control of the 1963 Investment Construction Plan, 17 pp, (pp 1-8).	JPRS 18748
Measures on the Approval, Distribution and Control of the Investment Construction Plan in 1963, 19 pp, (pp 3-8).	JPRS 18405
Public Meal Service, by B. Sucharda, 10 pp. CZECII, per, Narodni Vybory, No 2, Jan 1963, pp 66-71.	JPRS 18574
Foreign Trade Work Should Be Improved, by Jaroslav Kohout, 9 pp. CZECI, per, Noviny Zahranicniho Obchodu, Vol I, No 1, 1963, pp 3-5.	JPRS 18072
Selected Articles From the Czech Periodical	*ACSI 1-23/1/1

Selected Articles From the Czech Periodical Ropa a Uhlie.

No 6, 1962. A. For Further Increase of Efficiency in the Use of Lubricants in the Czechoslovak

B. Use of Domestic Silica Gels for the Chromatographic Separation of Dils, by J. Baxa, (pp 164-168).

Economy, by V. Husner, (pp 161-163).

C. Effect of Chlorinated Paraffin Wax in Mineral Oils on Oil-Resistant Rubber, by J. Hlavnicka, J. Nevaril, (pp 186-188). ID 2229419

Selected Articles From the Czech Periodical Ropa a Uhlie. (Contd)

Vol 1V, No 12, 1962, pp 353-355. Tasks and Experiences of Commerical and Technical Services in Relation to the Development of Petroleum Products, by Vaclav Husner, 6 pp. JPRS 17986

Application of Wage Principles in Resolving Economic Problems, by Jindrich Gref, 7 pp. CZECH, per, Rudo Pravo, Vol XLIII, No 22, 1963, p 2.

JPRS 18347

Annual JZD Bonuses, by Miloslav Sestak, 16 pp. CZECH, per, Socialisticke Zemedelstvi, Vol XIII, No 1, 1963, pp 8-13.

JPRS 18269

For a Further Development of Productive Forces in Industry, by Alexander Dubcek, 11 pp. CZECH, per, Zivot Strany, No 23, Dec 1962, pp 1404-1410.

JPRS 17994

Coma Work and Foreign Trade, by Willy Huettanrauch, 6 pp.
GERMAN, per, Aussenhandel, 1962, pp 1-3.

JPRS 18365

Alignment of the Economic Lovel of Socialist Countries and Foreign Trade, by G. Schabe, 7 pp.
GERMAN, per, Aussenhandel, 1962, pp 6-9.

JPRS 18365

Selected Articles From the German Periodical Aussenhandel and Innordeutscher Handel.

No 1, 1963. New Conditions Demand Scientifically Based Management Work in Foreign Trade, by U. Hofmann, 7 pp, (pp 5-7). JPRS 18260

Foreign Trade, Production Long-Range Planning, by H. J. Nitz, 18 pp, (8-16).

Questions of Export Structure Taking Into Account Extent of Material and Labor Input, by Ch. Mecht, 12 pp, (pp 17-21).

Tasks and Bases of Long-Range Planning in the Foreign Trade Enterprise, by H. Viehrig, 6 pp, (pp 30-32).

Selected Articles From the German Periodical Aussenhandel und Innerdeutscher Handel. (Contd)

No 2, 1963. Standardization -- Key to Successful Socialist International Specialization, by E. Beirau, 8 pp, (pp 11-14). JPRS 18365

Socialist International Cooperation in Machine Building, by H. Emmerich, 7 pp, (pp 14-17).

New Aspects of Socialist International Cooperation in the Chemical Industry, by K. Kleinert, 9 pp, (pp 18-20).

Multilateral Glearing Among Cema Countries, by H. J. Nitz, 7 pp, (pp 21-22).

East Germany's Support for the Economically Less Developed Countries, by Willy Schweinberger, 11 pp. GERMAN, per, <u>Doutsche Aussenpolitik</u>, No 12, pp 1403-1413.

JPRS 17957

The Nocessity and Importance of Revaluing Basic Assets, by Willi Rumpf, 9 pp. GERMAN, per, Doutsche Finanzwirtschaft, No 1, 1963, pp 5-9.

JPRS 18529

The Work of the Rosearch Institute of the Czechoslovak Ministry of Finance, by Julius Branik, 6 pp. GERMAN, per, Doutsche Finanzwirtschaft, No 1, 1963, pp 18-21.

JF'S 18529

Taxation of Handicraft Production Cooperatives and Their Members, by Erich Rost, 9 pp. GERMAN, per, Doutsche Finanzwirtschaft, No 1, 1963, pp S-2-S-6.

JPRS 18529

Selected Articles From the German Periodical Die Deutsche Landwirtschaft.

Vol XIV, No 1, 1963. Prospects of Socialist Agriculture in the German Democratic Republic, by R. Schick, 11 pp, (pp 15-17). JPRS 18004

Organization of Competition as the Principal Method in Agricultural Management, by J. Eiehstadt, 6 pp, (pp 17, 18).

Selected Articles From the German Periodical Die Deutsche Landwirtschaft. (Contd)

Vol XIV, No 1, 1963. Problems in the Development of the III LPGS, by R. Huwe, 9 pp, (pp 18, 19).

JPRS 18004

Are Both Phytopathological Research and Practical Plant Protection at the Highest Possible Level in the German Democratic Republic, by M. Klinkowski, 14 pp, (pp 30-32).

Declaration of the German Academy of Agricultural Sciences Dealing With Basic Questions of the Development of East German Animal Husbandry and the Feedstuffs Economy, 7 pp, (pp 36, 37).

Tasks of the East German Textile Industry in 1963, by Otto Lindenhayn, 13 pp. GERMAN, per, Deutsche Textiltechnik, No 1, 1963, pp 1-3.

JPRS 18147

About the Physiology of Wearing Apparel, by K. H. Richter. GERMAN, per, Deutsche Textiltechnik, No 1, 1963, pp 40-45.

*ACSI I-2352 ID 2229423

Uniting of the Inter-Linked Electric Power Systems of the European Socialist States, by L. Unger, 13 pp. GERMAN, per, Energietechnik, No 1, 1963, pp 2-7.

JPRS 18233

Experiences From the Parallel Operation of the Electric Power Systems of Socialist Countries, by C. Miller, 8 pp.
GERMAN, per, Energietechnik, No 1, 1963, pp. 8-11.

JPRS 18233

Soviet Block Oil on the European Market, by Alfred Stahmer, 14 pp.
GERMAN, per, Erdol und Kohle/Erdgas/Petrochemie, Vol XV, No 11, 1962, pp 941-943. (Call No. TN860.E67)

Army Map Service

Greater Efficiency in Railroad Operations in 1953, by Worner Lindner, 9 pp. GERMAN, per, Fahrt Frei, Vol XV, No 2, 1963, p 3.

The Most Important Assignments for Automobile Builders in 1963, 11 pp.
GERMAN, per, Kraftfahrzeugtechnik, Jan 1963, pp 3-5.

JPRS 18264

GDR/UAR Long-Term Trade Agreement and Long-Term Payments Agreement for 1963-1965, 13 pp. GERMAN, np, Markt Informationen, 2 Feb 1963, pp 10, 11.

JPRS 18365

Capacity Expansion of Polish Ports (11), 5 pp.
GERMAN, per, Markt Informationen, No 3, 1963, p 11.

JPRS 18246

Capacity Expansion of Polish Ports (111), 5 pp.
GERMAN, per, Markt Informationen, No 4, 1963, p 11.

JPRS 18246

Commodity Lists of the 1963 East German-Dannish Trade Agreement, the 1963 East German-French Trade Agreement, and the 1963 East German-Norwegian Trade Agreement, 9 pp. GERMAN, per, Marktinformationen fur den Aussenhandel, No 2, 12 Jan 1963, p 10.

JPRS 18209

Reconstruction of the Nordberg System in the Halle Freight Station, by Klaus Bochmann, 10 pp.
GERMAN, per, Der Operative Dienst, Vol VII, No 2, 1963, pp 45-48.

JPRS 18409

Bulgaria's Economic Problems, by Theodor Zotschew, 33 pp. GERMAN, per, Ost Europa Wirtschaft, Vol VII, No 4, Dec 1962, pp 283-306.

JPRS 18516

Development of the Material and Technical Base of Socialism in East Germany, by Hans Knop, 19 pp.
GERMAN, per, Padagogik, No 2, 1963, pp 149-158.

JPRS 18681

Science and Technology Must Be Mastered in the Construction Field, by Ernst Scholz, 6 pp. GERMAN, per, Presse-Informationen, 1963, pp 2, 3.

Expansion of Service Enterprises, 5 pp. GERMAN, per, Presse-Informationen, No 8, 1963, p 3. JPRS 18330 The Most Important Changes in 1963 Investment Reporting, by Siegfried Hooke, Andreas Zieger, 14 pp. GERMAN, per, Statistische Praxis, No 1, 1963, pp 13-15, 23, 24. JPRS 18365 New Production Cost Regulation in Effect, by II. Schwenkenbecher, 11 pp. GERMAN, per, Technische Gemeinschaft, Feb 1963, CAA91 2001 pp 55, 56. Organizing Vocational Programs for the Engineering Profession, by G. Straumer, GERMAN, per, Technishce Geminschaft, Feb 1963, pp 68, 69. JPRS 18516 Investments and Growth Rate of Production, by Klaus Steinitz, 31 pp. GERMAN, per, Wirtschaftswissenschaft, No 1, JPRS 17994 1963, pp $12-3\overline{2}$. Common Price Basis and Clearing of Payments Between the Socialist Countries, by Johannes Rudolph, 20 pp. GERMAN, per, Wirtschaftswissenschaft, No 1, 1963, pp 65-78. JPRS 17994 Comment on the Soviet Discussion Concerning Plan, Profit, and Bonus, by Ottomar Kratsch, GERMAN, per, Wirtschaftswissenschaft, No 1, 1963, pp 109-126. JPRS 17994 Problems of the East German Economy in the Beginning of 1963, 8 pp. GERMAN, per, Wochenbericht, No 3, 18 Jan 1963, JPRS 18122 pp 9-13. Palletized Freight Transportation Between Rumania and the USSR, by E. J. Riedel, J. W. Stefko, 6 pp. GERMAN, per, Z der Organisation fuer die Zusammenarbeit der Eisenbahnen OSShD No 6/28, 1962, pp 3-5. JPRS 18233

Information on OSShD Work, 20 pp. GERMAN, per, Z der Organization fuer die Zusammenarbeit der Eisenbahnen OSShD, No 6/28, 1962, pp 24-32.

JPRS 18233

Exports of Cema Member Countries to Establish the Effectiveness of Planned Bloc Investments, by Ferenc Balla, 6 pp.
HUNGARIAN, per, Elelmezesi Ipar, Vol XVI, No 11, 1962, pp 348-350.

JPRS 18072

Danubian Long. Range Gas Pipeline, by S. Kovacs, 5 pp.
HUNGARIAN, per, Epuletgepeszet, 1962, p 178.

Army Map Service

Fixing the Price of New Industrial Products and Technical Development, by Csikos-Nagy Gela, 5 pp. HUNGARIAN, per, Figyelo, No 49, 5 Dec 1962, p 3.

JPRS 18554

Structural Changes in Machine Tool Production, 7 pp.
HUNGARIAN, per, Figyelo, Vol VII, No 9,
27 Feb 1963, p 5.

JPRS 18434

Formation and Utilization of the Technical Development Fund by the Enterprises, by Zoltan Roman, 10 pp. HUNGARIAN, per, <u>Ipargazdasag</u>, Vol XV, No 1, 1963, pp 5-8.

JPRS 18264

Future of the Reorganized Shipbuilding Industry, 5 pp.
HUNGARIAN, per, <u>Ipargazdasag</u>, Vol XV, No 1, 1963, pp 21, 22.

JPRS 18264

Trends of Demand and Trade in Consumer Goods of the Rural Population From 1957 to 1961, by Gabor Boros, 15 pp.
HUNGARIAN, per, Kozgazdasagi Szemle, Vol IX, No 12, 1962, pp 1496-1505.

JPRS 17968

Dieselization in the Field of Hungarian Shipping, by Istvan Kovacs, 16 pp.
HUNGARIAN, per, Kozlekedesi Kozlony, Vol XVIII, No 50, 16 Dec 1962, pp 913-917.

JPRS 18107

New Customs Clearance System in International Highway Freight Transportation, by Istvan Zeley, 19 pp.
HUNGARIAN, per, Kozlekedesi Kozlony, Vol XIX, No 2, 1963, pp 21-24.

Bastern Europe Beonomic (Contd)

The Use of the Tir-Permits the Practice of Tir Customs Clearance, by Istvan Zeley, 15 pp. HUNGARIAN, per, Kozlekedesi Kozlony, Vol XIX, No 3, 1963, pp 37-40. JPRS 18330 Perspectives of Hungarian Danube-Sea Shipping, by Imre Gall, 11 pp. HUNGARIAN, per, Kozlekedestudomanyi Szemle, Vol XII, No 12, 1962, pp 544, 548. JPRS 18107 New Paint Industry Products at the Tisza Chemical Works, by Geza Szekely, 16 pp. HUNGARIAN, per, Magyar Kemikusok Lapja, Vol XVII, No 12, 1962, pp 547-551. JPRS 18050 Computer Applications in the Chemical Industry, by Gedeon Almasy, 16 pp. HUNGARIAN, per, Magyar Kemikusok Lapja, Vol XVII, No 12, 1962, pp 552-556. JPRS 18050 On the Categorical Classification of State Enterprises, by Jozsef Rozsa, 9 pp. HUNGARIAN, per, Munkaugyi Szemle, Vol VII, No 1, 1963, pp 11-15. JPRS 18312 Ideas on the Stipulation of 1963 Wage Regulations. by Endre Varga, 10 pp. HUNGARIAN, per, Munkaugyi Szemlo, Vol VII, No 2, 1963, pp 1-4. JPRS 18748 The Bonus System in 1962 in Construction and Building Material Industries, by Sandor Szalay, 13 pp. HUNGARIAN, per, Munkaugyi Szemle, Vol VII, No 2; 1963, pp 11-17. JPRS 18748 Role of the State Surveying and Mapping Office, HUNGARIAN, np., Muszaki Elot, 17 Jan 1963, pp 3, 6. JPRS 17942 The Taxing of Artisan Cooperatives' Income. by Erdei Jozsef, 12 pp. HUNGARIAN, per, Penzugy es Szamvitel, Vol VII, No 1, Jan 1963, pp 8-12. JPRS 18541 Level of Production on State Farms, by Henrik Szederkenyi, 24 pp.

JPRS 18601

HUNGARIAN, per, Statisztikai Szemle, Vol XLI,

No 1, 1963, pp 54-71.

The Manpower Situation in Agriculture, by Istvan Palfai, 28 pp. HUNGARIAN, per, Statisztikai Szemle, Vol XLI, No 2, 1963, pp 115-137. JPRS 18601 The Technical Level of Productive Work in the State Construction Industry, by Laszlo Keller, HUNGARIAN, per, Statisztikai Szemle, Vol XLI, No 2, 1963, pp 138-154. JPRS 18642 Toward the Fulfillment of the Five-Year Plan, by Jozsef Balint, 14 pp. HUNGARIAN, per, Tarsadalmi Szemle, Vol XVIII, No 2, 1963, pp 37-49. JPRS 18312 Modernization of the Production Structure of the Machine Industry, by Ferenc Janosi, 18 pp. HUNGARIAN, per, Tarsadalmi Szemle, No 2, 1963, JPRS 18050 pp 50-64. Performance of Railroad Transport in 1962. and Its Tasks in 1963, by Jozsef Lindner, 13 pp. HUNGARIAN, per, Vasut, Vol XIII, No 1, 1963, pp 1-4. JPRS 18409 The Electrical Energy Economy in View of the General Energy Economy, by Bela Havas, 28 pp. HUNGARIAN, per, Villamossag, Vol XI, No 1, 1963, pp 1-7. JPRS 18246 Regulations of the Polish Register of Shipping. by Roman Somnicki, 7 pp. POLISH, per, Budownictwo Okretowe, Vol VII, No 11, 1962, pp 386-388. JPRS 18107 1963 Tasks of the Main Center for Research and Development of Highway Techniques, by Marian Oseka, 16 pp. POLISH, per, Drogownictwo, Vol XVIII, No 2, 1963, pp 1-4. JPRS 18542 Achievements and Goals of Road Laboratories Part I, by Stefan Rolla, 15 pp. POLISH, per, Drogownictwo, Vol XVIII, No 2, 1963, pp 27-30.

Present and Future Inventories of Construction and Road Machinery, by Alfons Feder, 8 pp. POLISH, per, Drogownictwo, No 2, 1963, pp 45-47.

JPRS 18434

Rates and Conditions for Sending Packages Abroad by Land, Sea, or Air, 51 pp. POLISH, per, <u>Dziennik Lacznosci</u>, No 22, 1962, pp 139-161.

JPRS 18330

Selected Articles From the Polish Periodical Finanse.

No 10, 1962. Inducements and Production Costs, by Bronislaw Fick, 14 pp, (pp 12-21). JPRS 18136

Unit Costs in Housing Construction, by Jerzy Gnewaszewski, 9 pp, (pp 49-55).

No 11, 1962, pp 1-17.
Principles of the Distribution of Profits and Subsidies of Socialist Enterprises, by Bronislaw Blass, 18 pp.

JPRS 18199

Vol XII, 1962. Developments in Savings, by Jerzy Albrecht, 5 pp, (pp 1-4). JPRS 18136

New Stage in Financing Contract Procurement, by Tadeusz Wyszomirski, 9 pp, (pp 62-69).

Consumer of Goods and the Market, by Stanislaw Gabryl, 9 pp. POLISH, np, Gazeta Handlowa, No 4, 11 Jan 1963, pp 1, 2.

JPRS 18567

Selected Articles From the Polish Periodical Gospodarka Planowa.

No 9, 10, 1962. Long-Range Goals for Development of Polish Chemical Industry, by Jerzy Gdynia, Jerzy Mosdorf, et al, 15 pp, (pp 16-21). JPRS 17922

Development of Mechanization of Heavy Operations in Basic Branches of National Economy, by Anatol Sielezniew, Jerzy Swidzinski, 15 pp, (pp 21-28).

Selected Articles From the Polish Periodical Gospodarka Planowa. (Contd)

No 11, 1962, pp 9-16.
Change in the State and Structure of People
Employed in Polish Agriculture in 1950-1960,
by Izaslaw Frenkol, 20 pp, (pr 9-16).

No 12, 1962.
After the 1962 Harvest, by Antoni Leopold,
24 pp, (pp 1-6).

Some Problems of the Regional Balance of Manpower in Agriculture, by Boleslaw Krol, Marian Koziej, 19 pp, (pp 51-55).

No 1, 1963. Crucial Problems in the Economic Plan for 1963, by Stefan Jedrychowski, 24 pp, (pp 1-11).

1962 -- The Decisive Year for CEMA, by Artus Bodnar, 11 pp, (pp 12-16).

Role of Working Assets in Economic Balance, by Adam Zwas, 13 pp, (pp 32-38).

Development of the Economy of Agricultural Producer Cooperatives in 1959-1961, by Jozef Majdak, 12 pp, (pp 39-42).

No 2, 1963. Problems Involved in Dividing Poland Into Economic Regions, by Tadousz Hoff, 20 pp, (pp 24-32).

Socio-Economic Processes in Forming New Industrial Districts in Poland, by Tadeusz Mrzyglod, 9 pp, (pp 33-37).

Organizational Problems in Foreign Trade, by Tomasz Antoniewicz, Stanisław Szczypiorski, 12 pp.
POLISH, per, <u>Handel Zagraniczny</u>, Vol VII, No 11, 1962, pp 481-486.

JPRS 18059

JPRS 18004

JPRS 18072

JPRS 18069

JPRS 18069

JPRS 18222 JPRS 18554

Selected Articles From the Polish Periodical Inwestycje i Budownictwo.

—	
No 11, 1962. Technical Cadres in Construction Industry, by Henryk Horodko, 19 pp, (pp 15-18).	JPRS 18147
New M. Nowotko Metallurgical Plant, by Stanislaw Kawinski, 16 pp, (pp 22-25).	
No 1, 1963. Investment Problems for 1963, by Marian Bartnicki, 10 pp, (pp 1-4).	JPRS 18516
Planning Deadlines and Computing the Effects Obtained, by Henryk Swidzinski, 9 pp, (pp 8-12).	
The Market in Pharmaceutical Products, by Vasilije Jankovic, 12 pp. POLISH, per, Kemija u Industriji, Vol II, No 11, 1962, pp 671-673.	JPRS 18147
The Prospects for the Development of the Upper Silesian Industrial Okreg, by Marian Dziewonski, 24 pp. POLISH, per, Miasto, Vol XIII, No 11, 1962, pp 1-8.	JPRS 18050
Industrialization and Urbanization of Plock Region, by Roman Chrabaszoz, 15 pp. POLISH, per, Miasto, Vol XIII, No 12, 1962, pp 3-9.	JPRS 18567
Selection of Site for Power Plant in Northern Part of Poland, by Janusz Kowalski, 9 pp. POLISH, per, Miasto, Vol XIII, No 12, 1962, pp 14-17.	JPRS 18567
Changes in the Rate of Residential Construction in Poland, 1956-1960, by T. Zarski, 7 pp. POLISH, per, Miasto, No 12, 1962, pp 32, 33.	JPRS 18246
Road Traffic Code, by Zbigniew Drexler, 31 pp. POLISH, per, Motoryzacja, No 12, 1962, pp 315-322.	JPRS 18374
Recent Achievements of Gas and Petroleum Industry, 7 pp. POLISH, per, Nafta, No 1, 1963, pp 1-4.	JPRS 18112

Main Trends in Exploration for Oil and Gas Deposits in Carpathian Mountains, by Feliks Mitura, Henryk Kozikowski, 6 pp. POLISH, per, Nafta, No 1, 1963, pp 6-8.

JPRS 18112

Principles for Preparing Long Ranges Plans of Scientific Development, by Witold Nowacki, 15 pp. POLISH, per, Nauka Polska, No 3, 1959, pp 1-16.

JPRS 18156

Selected Articles From the Polish Periodical Nowe Drogi.

Vol XVII, No 1, 1963. The Elckground of the Present Economic Situation, by Stanislaw Kuzinski, 11 pp, (pp 67-75). JPRS 18279

Multi-Year Plans: Construction and Realization, by Czeslaw Bobrowski, 23 pp, (pp 110-129).

No 3, 1963. On Peasant Self-Government in Rural Cooperatives, by Z. Staros, St. Szczepanski, 26 pp, (pp 12-21). JPRS 18602

On Peasant Self-Government in Agricultural Circles, by Konrad Bajan, 17 pp, (pp 21-27).

On Peasant Self-Government in Agricultural Producer Cooperatives, by Boleslaw Bodasinski, 17 pp, (pp 27-33).

Rural Investments From 1961-1965, by Juliusz Zarzycki, Dymitr Perun, 17 pp, (pp 104-109).

The Textile Institute, a Polish Research Institute. POLISH, per, Polish Foreign Trade Journal, No 58 (2), 1962.

Army Materiel Command FLRS-1262-112.

Development of Export of Private Light Industry, by Mieczyslaw Czyhiryn, 5 pp. POLISH, np, Przeglad Drobnej Wytworczosci, No 20, Oct 1962, pp 8, 9.

JPRS 18233

Testing Accessibility of Coal by Means of Radioactive Isotopes, by Wlodzimierz Sikora, Jozef Bujok, 9 pp.
POLISH, per, Przeglad Gorniczy, No 12, 1962, pp 697-700.

1962 Achievements and 1963 Goals in Railroad Electrification, 6 pp.
POLISH, per, Przeglad Kolejowy Elektrotechniczny, Vol XV, No 1, 1963, pp 1, 2.

JPRS 18374

Comparison of Technical and Operational Indices in the Electric Traction System for the First Six Months of 1961 and 1962, by Edward Mierzejewski, 8 pp.

POLISH, per, Przeglad Kolejowy Elektrotechniczny, Vol XV, No 1, 1963, pp 11-14.

JPRS 18374

Minister of Transportation Reviews 1962 Achievements of Polish Railroads, 17 pp.
POLISH, per, Przeglad Kolejowy Przewozowy,
No 1, 1963, pp 1-4.

JPRS 18121

1963 Goals of Polish Railroads, by Mieczyslaw Zajfryd, 14 pp.
POLISH, per, Przeglad Kolejowy Przewozowy,
No 1, 1963, pp 4-7.

JPRS 18121

Selected Articles From the Polish Periodical Przeglad Komunikacyjny.

Vol I, No 12, 1962. Reduction of Costs Through Linear Programming in Transportation, by Stefan Kamerski, Micczyslaw Welzandt, 10 pp, (pp 444-447).

JPRS 18147

Employment Situation in Ministry of Transportation, by Wladyslaw Kostyra, 10 pp. (pp 453-456).

No 2, 1963. 1963 Tasks of the Transportation Industry, by Zbigniew Wojterkowski, 26 pp, (pp 41-46). JPRS 18692

Maritime Cement Transloading Station in Gdansk-Gdynia, by Franciszek Taczanowski, 15 pp, (pp 56-60).

Recent Organizational Changes in the Ministry of Transport and PKP Enterprise, 8 pp, (pp 67, 68).

pp 757-766.

1962, pp 352-354.

Achievements of Ceramics Industry, 6 pp.

POLISH, per, Szklo i Ceramika, Vol XIII, No 11,

Description of Polish-Built Railroad Rolling Stock, by Franciszek Tatara, 11 pp. POLISH, per, Przeglad Mechaniczny, No 19, 20, JPRS 18121 Oct 1962, pp 596-600. Hydraulic Power Systems in Poland, by Eugeniusz Olko, 8 pp. POLISH, per, Przeglad Mechaniczny, No 23, JPRS 18330 i962, pp 714-716. Description of Radio and Television Antennas in Poland, by Jan Polak, 5 pp. POLISH, per, Przeglad Techniczny, No 9, 1962, pp 95, 96. JPRS 18374 Inter-Ministry Cooperation for the Development of Mining in Poland, by Boleslaw Krupinski, POLISH, per, Przeglad Techniczny, No 48, 1962, pp 1, 3. JPRS 18387 Effect of Brown Coal on Development of Electric Power Industry, by Kazimierz Wrobel, 5 pp. POLISH, per, Przeglad Techniczny, No 51, 1962, JPRS 18435 p 4. Planned Development of Technology in Forestry and the Wood Industry, 14 pp. POLISH, per, Przemysł Drzewny, No 11, 1962, pp 1-5. JPRS 18041 Drying Foodstuffs by the Liophilization Method, by Tadeusz Skrzynski, 6 pp. POLISH, per, Przemysł Spezywczy, Vol XVI, No 8, ACSI I-8295 ID 2224775 1962, pp 6-12. Problems in Exporting Food Products, by Waclaw Zawilinski, 11 pp. POLISH, per, Przemysł Spozywczy, No 12, 1962,

JPRS 18260

Selected Articles From the Polish Periodical Technika i Gospodarka Morska.

echilika I dospodarka morska.	
No 11, 1962. Routes of Czechoslovak Maritime Trade, by Otokar Slampa, 12 pp, (pp 322, 323).	JPRS 18121
Domestic Production of Maritime Electronic Appliances, by Wlodzimderz Mackowiak, 7 pp, (pp 326-328).	JPRS 17986
Actors for Establishing a Floating Dock Construction Center, by Eugeniusz Filipowicz, 18 pp, (pp 329-331).	JPRS 18121
Planned Maritime Economy in 1963, 5 pp, (pp 343, 344).	JPRS 18121
Vol XIII, No 1, 1963, pp 1, 2. Key Problems of Maritime Economy in 1963, by Stanislaw Darski, 6 pp.	JPRS 18409
Long Range Plan for Science, by Wlodzimierz Michajlow,	
5 pp. POLISH, np. Trybuna Ludu, No 31, 1959, p 6.	JPRS 18156
Accounting System in Selected Chemical Plants, by Andrzej Zmuda, 5 pp. POLISH, np, Trybuna Ludu, 26 Jan 1963, p 3.	JPRS 18172
Goals of the Fishing Industry, by Jorzy Grajter,	
5 pp. POLISH, per, Tygodnik Morski, Vol VI, No 5(238), 1963, pp 1, 4.	JPRS 18367
New Type Polish Mining Drilling Machine, by Zbigniew Gebicki, Wieslaw Rezycki, 7 pp. POLISH, per, Wiadomosci Gornicze, Vol XIII, No 12, 1962, pp 442-445.	JPRS 18264
Neglected Farms - the Problem and Means of Its Solution, by Leszek Kaczmarczyk, 23 pp. POLISH, per, Wies Wspolczesna, No 1, 1963, pp 62-71.	JPRS 18367
Basic Development Tendencies of Producer Cooperatives, by Tadeusz Hunek, 32 pp. POLISH, per, <u>Wies Wspolczesna</u> , No 1, 1963, pp 77-89.	JPRS 18367

Selected Articles From the Polish Periodical Zycie Gospodarcze.

No 49, 9 Dec 1962. The Draft of the National Economic Plan for 1963, 7 pp, (pp 1, 9).

Economic Progress in Industry and Services, 28 pp, (pp 5-7).

No 2, 13 Jan 1963, p 3. Branch or Regional Organization, by Boleslaw Warzecha, 6 pp.

No 8, 1963.

Determinants of Agricultural Changes in Poland, by Mieczyslaw Mieszczankowski, 20 pp, (pp 1, 7).

Materials Conservation by Machine-Building Industry, by Wladyslaw Dudzinski, 8 pp, (pp 4, 5).

No 9, 3 Mar 1963.
Scientists Speak on Agricultural Roserves,
35 pp, (pp 1, 4, 5).

The Concept of State Farms, by Mieczyslaw Mieszczankowski, 19 pp, (pp 6, 7).

Duties of Science in Building Socialism, by Henryk Jablonski, 5 pp. POLISH, per, Zycie Szkoly Wyszej, No 4, 1959, pp 8-14.

The Necessity for Increasing and Improving the Production of Prefabricated Construction Elements, by M. Weintraub, 9 pp. RUMANIAN, per, Constructorul, Vol XV, No 681, 1963, pp 1, 2.

Selected Articles From the Rumanian Periodical Evidenta Contabila.

Vol VII, No 12, 1962. Intensified Efforts in Locating and Utilizing Internal Reserves, by I. Oprescu, 7 pp, (pp 7-12). JPRS 18069

JPRS 18347

JPRS 18574

JPRS 18669

JPRS 18574

JPRS 18156

JPRS 18374

Selected Articles From the Rumanian Periodical Evidenta Contabila. (Contd)

Vol VII, No 12, 1962. Reduction of Distribution Costs in Consumer Cooperatives, by I. Chitic, V. Bozero, 6 pp. (pp 19-23).

Financial Control in Support of Machine Tractor Stations, by V. I. Birer, 5 pp, (pp 24-27).

No 1, 1963.

Mechanization of Accounting Procedures, by Gh. Nestorescu, 10 pp, (pp 16-21).

Mobilization of Internal Reserves in the Investment Sector, by I. Mocanu, 10 pp, (pp 29-34).

For An Improvement in the Financial Planning of Agricultural Collectives, by P. Tiba, S. Imberg, 15 pp.
RUMANIAN, per, Finante si Credit, No 12, 1962, pp 57, 58.

Methodological Problems of Planning in the Machine Building Industry, by Gh. Vasilescu, 15 pp.
RUMANIAN, per, Finante si Crodit, No 1, 1963, pp 42-53.

For the Realization of a Qualitatively Higher Level of the Control and Revision Plan for 1963, by Emil Hatos, 6 pp. RUMANIAN, np, Gazeta Finantelor, No 497, 16 Jan 1963, pp 1, 4.

Tasks of Financial Economists in the Execution of the 1963 Budget, by A. Popper, 10 pp. RUMANIAN, np, Gazeta Finantelor, 20 Feb 1963, pp 1, 6.

Tasks of the Fiscal Apparatus in Establishing and Collecting Duties and Taxes From the Population in 1963, by Elena Sevcenco, 6 pp. RUMANIAN, np. Gazeta Finantelor, No 590, 6 Feb 1963, pp 1, 6.

JPRS 18369

JPRS 18272

JPRS 18321

JPRS 18669

JPRS 18312

JPRS 18272

Technical Control--Important Factor in Obtaining High Quality Food Products, by N. Vlad, 7 pp. RUMANIAN, per, Industria Alimentara, Produse Vegetal, Vol XIII, No 10, 1962, pp 293-295.

JPRS 18321

Tasks of the Textile and Clothing Industry in 1963, 6 pp. RUMANIAN, per, Industria Textila, Vol XIII, No 12, 1962, pp 477-478.

JPRS 18542

The State Plan for 1963 and the Tasks of the Leather, Glass, and Household Goods Industries, by Ion Moldovan, 7 pp.
RUMANIAN, per, Industria Usoara, Vol IX, No 12, 1962, pp 503-505.

JPRS 18542

Technical Documentation in Support of the Introduction of New Technology and the Improvement of Quality in Light Industry, by Mircea Blanaru, 9 pp.
RUMANIAN, per, Industria Usoara, Vol X, No 1, 1963, pp 1, 2.

JPRS 18642

Mechanizing the Construction and Maintenance of Forest Roads, 6 pp.
RUMANIAN, np. Muncitorul Forestier, 10 Jan 1963, pp 1, 3.

JPRS 18567

Perspectives for Water Regulation Work in 1963, by S. Boeru, 8 pp. RUMANIAN, per, Probleme Agricole, Vol XV, No 1, 1963, pp 25-30.

JPRS 18321

Selected Articles From the Rumanian Periodical Probleme Economice.

Vol XV, No 12, 1962. Growth of Labor Productivity-Essential Factor for the Victory of Socialism, by Simion Taigar, 25 pp, (pp 107-129).

JPRS 18110

Increase of Consumer Welfare in Rumania, by Manea Manescu, 14 pp, (pp 137-150).

JPRS 18110

Supplying the National Economy With Trained Cadres, by Ilie Murgulescu, 18 pp, (pp 151-165).

JPRS 18073

The Formation of Monetary Accumulations and Their Utilization for the Development of the Technical and Material Basis of Socialism, by Ion Craiu, 17 pp, (pp 166-181).

Selected Articles From the Rumanian Periodical Probleme Economice. (Contd)

LIONIBME ECONOMISES. (CONCA)	
No 1, 1963. Change in the Structure of Industrial Production, by 1. Lemnij, 15 pp, (pp 16-28).	JPRS 18050
The Combining of Social and Private Interests in Collective Farms, by Tr. Lazar, 28 pp, (pp 44-57).	JPRS 18269
Possibilities for Improving Economic Activity in Regional Construction Trusts, by N. Cucui, 9 pp, (pp 111-117).	JPRS 18330
Regularity of Circulation the Main Concern in Railroad Operations, 6 pp. RUMANIAN, per, Revista Cailor Ferate, Vol X, No 12, 1962, pp 625, 626.	JPRS 18194
Review of Railroad Operations in 1962 and Preview for 1963, 11 pp. RUMANIAN, per, Revista Cailor Ferate, Vol XI, No 1, 1963, pp 1, 2.	JPRS 18642
Cema Conference on Problems of Water Economy, by I. Deliabaltov, 5 pp. RUMANIAN, per, Revista Internationala Pentru Agricultura, No 1, Jan/Feb 1963, pp 99-101.	JPRS 18574
First Conference of Highway Specialists of Socialist Countries, 9 pp. RUMANIAN, per, Revista Transporturilor, Vol IX, No 12, 1962, pp 509-511.	JPRS 18246
Problems of Highway Design and Organization of Road Circulation, Materials of the First Conference of Highway Specialists of Socialist Countries, by Constantin Marinescu, 29 pp. RUMANIAN, per, Revista Transporturilor, Vol IX,	
No 12, 1962, pp 511-519. Problems of Increasing Metal Production in 1963, by I. Marinescu, 5 pp.	JPRS 18246
RUMANIAN, np, Scinteia, Vol XXXII, No 5766, 8 Jan 1963, pp 1, 2. Correspondence Between Rumanian Oils and Some	JPRS 18112
Foreign Oils, by M. Bulaceanu, 13 pp. RUMANIAN, per, Standardizarea, Vol XIV, No 11, 1962, pp 579-584.	JPRS 17419

Proceedings of the First Section of the Seventh Conference of Representatives of the Organization for Standardization in the Socialist Countries --- Steel Types, by C. Pretorian, 6 pp. RUMANIAN, per, Standardizarea, Vol XIV, No 12, 1962, pp 649-652. JPRS 18209 Proceedings of the Seventh Section Tolerance and Adjustments at the Seventh Standardization Conference of the Socialist Countries, by R. Septelici, 5 pp. RUMANIAN, per, Standardizarea, Vol XIV, No 12, 1962, pp 652-654. JPRS 18209 Application of Modern Sciences and Technology in Rumanian Agriculture, by B. Schiopu, 8 pp. RUMANIAN, per, Tribuna, Vol XV, No 52, 27 Dec 1962, pp 4, 5. JPRS 18574 Possibilities of Expanding the Socialized Land Fund by Lease and Purchase, by S. Silbiger, 14 pp. SERBIAN, per, Poljoprivreda i Zadrugarstvo, Vol IX, No 11, 1962, pp 18-22. JPRS 18248 Formation of Regulations on Maximum Land Holdings, by Mileta Miletic, 7 pp. SERBIAN, per, Poljoprivreda i Zadrugarstvo, Vol IX, No 11, 1962, pp 23-25. JPRS 18248 Further Development of Pomiculture in Yugoslavia, by Zivomir Milojevic, 26 pp. SERBIAN, per, Poljoprivreda i Zadrugarstvo, Vol IX, No 11, 1962, pp 26-33. JPRS 18248 Inequality of Rents in Old and New Buildings, by Stojka Milojevic, 10 pp. SERBO-CROATIAN, per, Komuna, No 1, 1963, pp 10-12. JPRS 18642 Unfair Competition in Trade With Foreign Countries, by Radoje Prica, 18 pp. SERBO-CROATIAN, per, Nova Administracija, No 11, 12, 1962, pp 880-892. JPRS 18461 Production and Consumption of Cereals in Yugoslavia, by Milun Ivanovic, 24 pp. SERBO-CROATIAN, per, Nova Trgovina, No 12, 1962, pp 466-470. JPRS 18222 Neglected and Ignored Form of Tourism in Yugoslavia, by German Stojkovie, 14 pp. SERBO-CROATIAN, per, Nova Trgovina, No 12, 1962, pp 476-478. JPRS 18147

Selected Articles From the Serbo-Croatian Periodical Poljopriveda i Zadrugarstvo.

No 12, 1962. Agricultural Production and Socio-Economic Changes in the Village, by Petar Markovic, 15 pp, (pp 2-5).

Opportunities for Expansion of Socially-Owned Land Through Lease and Purchases, by S. Silbiger, 16 pp, (pp 6-9).

On the Needs and Methods of Agricultural Planning on the Opstina Level, by Dusan Janozevic, 14 pp, (pp 10-13).

Tax Policy in Sales of Land, 6 pp, (pp 35, 36).

The Function and Organization of Social Planning in Opstinas and Srezes, by Branko Kubovic, 12 pp. SERBO-CROATIAN, per, Uprava, No 9, 10, 1962, pp. 461-470.

Regulations Enacted by People's Councils 1954-1961, by Rajko Gligorevic, 17 pp. SERBO-CROATIAN, per, Uprava, No 9, 10, 1962, pp 481-491.

Housing Construction, by Dusan Basara, 28 pp. SERBO-CROATIAN, np. Vjesnik, 27 Feb 1963, p 4.

Political

Serbian Communists Discuss Ideological and Political Tasks, 6 pp.
ALBANIAN, np, Flaka e Vellaznimit, No 607, 20 Jan 1963, p 4.

Excessive Contemporaneity, by Pancho Danchev, 8 pp.
8 ULGARIAN, np, Literaturen Front, No 7,
14 Feb 63, p 2.

Author and Motion Picture Film, by Yako Molkhov, 6 pp. BULGARIAN, np, <u>Literaturen Front</u>, No 7, 14 Jan 63, p 3.

JPRS 18059

JPRS 18541

JPRS 18541

JPRS 18567

JPRS 18304

JPRS 18311

Eastern Europe Political (Contd)

Discussion of the Bulletin of the Bulgarian Institute of Literature, 6 pp. BULGARIAN, per, Literaturna Misul, No 1, Jan-Feb 1963, pp 152-154.

JPRS 18545

The Annual Accountability Meeting of the Bulgarian Institute of Literature, 8 pp. BULGARIAN, per, Literaturna Misul, No 1, Jan-Feb 1963, pp 155-158.

JPRS 18545

The Rudder Socialist Realism in Art and Literature, 6 pp.
BULGARIAN, np, Narodna Kultura, No 7,
16 Feb 63, pp 1, 2.

JPRS 18311

Socialist Realism and Innovation, by N. Melamed, 7 pp. BULGARIAN, np, Narodna Kultura, No 7, 16 Feb 63, pp 3, 4.

JPRS 18311

The Development of Socialist Democracy in Bulgaria, by Boris Spasov, 15 pp. BULGARIAN, per, Novo Vreme, No 1, 1963, pp 45-56.

JPRS 18262

The Socialist Principles of Distribution According to Labor, by Aleksandur Chalukov, 9 pp.
BULGARIAN, per, Partien Zhivot, No 3, 1963, pp 86-90.

JPRS 18743

Revival of Capitalism in Rural Areas of Yugoslavia, by Wei Yang, 8 pp. CHINESE, per, Shih-Shih Shou-Ts'e, No 20, Oct 1962.

JPRS 18025

Role and Importance of Local Organizations, by Djordje Djuric, 10 pp. CROATIAN, per, Uprava, Vol X, No 11, 12, 1962, pp 553-559.

JPRS 18743

A Mighty Impulse Toward the Expansion of Ideological Work, by Miloslav Fromer, 10 pp. CZECH, per, Zivot Strany, No 1, 1963, pp 11-15.

JPRS 18188

In the Sign of Unshakable Faith in Proletarian Internationalism, by Dusan Rozehnal, 7 pp. CZECH, per, Zivot Strany, No 1, 1963, pp 16-19.

Eastern Europe Political (Contd)

East Germany: Hold High the Banner of Unity, 6 pp.	
GERMAN, np, Neues Deutschland, 24 Feb 1963.	JPRS 18143
Sartre's Speech at 1962 World Peace Congress in Moscow, by Jean Paul Sartre, 17 pp. GERMAN, per, Sinn und Form, No 5, 6, 1962, pp 805-815.	JPRS 18568
Problem of the International Socialist Economic	
System, by Dietrich Maskow, 9 pp. GERMAN, per, Staat und Recht, Vol XII, No 2, 1963, pp 345-351.	JPRS 18545
Critique of a Book on Communism, by Max Schneider, 9 pp.	
GERMAN, per, Weg und Ziel, No 1, 1963, pp 30-38.	JPRS 18143
Marxism and the Philosophy of Man, by	
Adam Schaff, 8 pp. GERMAN, per, Weg und Ziel, Vol XXI, No 3, Mar 1963, pp 209-216.	JPRS 18648
Two Views of the Yugoslav Position in the Moscow-Peking Dispute, 17 pp. ITALIAN, per, Rinascita, 16 Feb 1963, pp 14, 15.	JPRS 18143
De Gaulle's Policies, by Al. Kawalkowski,	
24 pp. POLISH, per, <u>Kultura</u> , No 3, 1963, pp 86-99.	JPRS 18447
Gomulka's Poland, by Witold Jedlicki, 26 pp. POLISH, per, Kultura, No 3, 1963, pp 107-119.	JPRS 18448
Peaceful Coexistence and the Ideological Struggle A Polish View, 10 pp. POLISH, per, Nowe Drogi, No 2, 1963, pp 3-10.	JPRS 18063
Comrade Khrushchev Greets the Sixth Congress of the German Socialist Unity Party, 10 pp. VIETNAMESE, np, Nhan Dan, 19 Jan 1962, p 4.	JPRS 18255
Long Live the Czech-Vietnamese Friendship, by Pham Thien, 9 pp. VIETNAMESE, np, Nhan Dan, Jan 22, 1963, p 4.	JPRS 18025
	0 10025

Eastern Europe Military

No 4489, p 2.

The Training Role of Noncommissioned Officers in the Bulgarian Army, by D. Velev, 8 pp. BULGARIAN, np. Narodna Armiya, 22 Dec 1962, p 3.

Training Problems for Noncommissioned Officers in the Bulgarian Army, 6 pp. BULGARIAN, np. Narodna Armiya, 9 Mar 1963,

JPRS 18536

JPRS 18094

Propaganda Work of the Voluntary Organization for Defense Assistance DOSO, by Khristo Ruskov, 10 pp. BULGARIAN, np. Patriot, Sofia, 28 Feb 1963, p 2.

JPRS 18536

Individual Protection Against Chemical Warfare Agents, by Dako Barac. CROATIAN, per, Vojni Glasnik, No 5, 1962, pp 20-26.

*ACSI I-8005-A ID 2216542

Action of Atomic Weapons and Importance of Road Columns, by Vladimir Timchonko. CROATIAN, per, Vojni Glasnik, No 5, 1962, pp 35-38.

*ACSI I-8005-B ID 2216542

Supplying the Company-Battery in War, by Mihailo Mitrovic. CROATIAN, per, Vojni Glasnik, No 5, 1962, pp 45-48.

*ACSI I-2225 ID 2227666

Using Artillery Ammunition as Mines, by Marko Pantic. CROATIAN, per, Vojnotehnicki Glasnik, No 9, 1962, pp 661-664.

*ACS1 I=2436-A ID 2229448

Modern Instantaneous and Delayed Action Surprise Mines, by Silvestar Dobrovic. CROATIAN, per, Vojnotehnicki Glasnik, No 9, 1962, pp 665-668.

*ACSI I-2436-B ID 2229448

Modern Equipment for Fire Control of Medium Caliber AA Artillery, by Pero Grubacevic. CROATIAN, per, Vojnotehnicki Glasnik, No 11, 1962, pp 839-847.

*ACSI I-2395 ID 2229437

Handbook for Reserve Offices, 207 pp. CZECI, rpt, Prirucka Pro Dustojnika v Zaloze, 1962, pp 1-299, Encl No 1 to R-528-62, OUSARMA, Prague.

ACSI I-8009 ID 2221085

Eastern Europe Military (Contd)

pp 2-5.

Manual of Parachutism - Theory and Practice of the Sport of Parachuting, by Zornik, Lusnikov, et al, 118 pp. CZECH, rpt, Ucebnice Parasutismu -- Teorie a ACSI I-8196 Praxe Parasutistickeho Sportu, 1961, pp 1-231. ID 2224737 Czechoslovak Jet Trainer L-29, by Vaclav Nemecek, CZECH, per, Kridla Vlasti, Vol II, No 1, 9 Jan 1963, pp 16-18. JPRS 18200 Triumph of Versatility, by Peter Stache, 5 pp. GERMAN, per, Aero Sport, No 10, 1962, pp 30-32. 9680143 FTD-TT-62-1680 Charter of the League of Solders Friends, POLISH, per, Elpezetowiec, No 43 (251), 21-27 Oct 1962. JPRS 18070 The Polish Air Cushion Vehicle, by Jerzy Bien, POLISH, per, Horyzonty Techniki, No 12, 1962, JPRS 18336 pp 7-9. The Polish Airliner MD-12, by Z. Lewalski, POLISH, per, Horyzonty Techniki, No 12, 1962, JPRS 18336 pp 10-13. Principles for the Air Defense of Coastal Areas and Naval Bases, by Edward Tepczynski, 10 pp. POLISH, per, Przeglad Morski, No 12, 1962, pp 10-16. JPRS 18094 Methods of Tactical Training for Officers, by Jan Pinkiewicz, 8 pp. POLISH, per, Przeglad Morski, No 1, 1963, pp 11-16. JPRS 18536 Battle Training for Torpedo Boat Crews, by Tadeusz Szymkowiak, 9 pp. POLISH, per, Przeglad Morski, No 1, 1963, pp 17-26. JPRS 18536 New Stage in Training Firefighters, by Zdzislaw Zalowski, 10 pp. POLISH, per, Przeglad Pozarniczy, No 12, 1962,

Eastern Europe Military (Contd)

Training and Other Fire-Fighting Tasks in 1963, 8 pp. POLISH, per, Przeglad Pozarniczy, No 1, 1963, pp 3-6.

JPRS 18396

Discussion With Young Officers After a Year of Work, by Edward Skrzypkowski, 35 pp. POLISH, per, Wojsko Ludowe, No 1, 1963, pp 43-51.

JPRS 18396

Principles of Political Training, by Jozef Baryla, 8 pp. POLISH, per, Wojsko Ludowe, No 2, 1963, pp 21-24.

JPRS 18675

Problems of Psychology and Discipline in Atomic Warfare, by Jerzy Lewandowski, 12 pp. POLISH, per, Wojsko Ludowe, No 2, 1963, pp 25-31.

JPRS 18675

Refueling in the Air, by T. Krolikiewicz, 10 pp. POLISH, per, Wojskowy Przeglad Lotniczy, Vol XV, No 9, 1961, pp 36-43. 9668357

FTD-TT-62-1699

Navigator Protection of Ground Forces by Fighter Aviation, by Z. Guminski, 6 pp. POLISH, per, Wojskowy Przeglad Lotniczy, No 1, 1962, pp 13-16. 9680142

FTU-TT-62-1704

Air Combat in the Stratosphere, by Czesław Miodonski, 6 pp. POLISH, per, Wojskowy Przeglad Lotniczy, No 12, 1962, pp 10-16.

JPRS 18094

Defects in the YAK-12 During Crosswind Takeoffs and Landings, by A. Milkiewicz, 11 pp. POLISH, per, Wojskowy Przeglad Lotniczy, No 1, 1963, pp 22-29.

JPRS 18536

The Evolution of the Military Penal System, by Teofil Lesko, 12 pp.
POLISH, per, Wojskowy Przeglad Prawniczy,
No 4, Oct-Dec 1962, pp 508-517.

JPRS 18070

The Crime of Desertion to the Enemy, by Sykstus Gusz, 12 pp.
POLISH, per, Wojskowy Przeglad Prawniczy, No 4, Oct-Dec 1962, pp 518-528.

Eastern Europe Military (Contd)

Civil Defense, by Piotr Katel, G. Sylwowski, 7 pp.
POLISH, per, Zolnierz Polski, No 9, 1963, pp 12, 13.

JPRS 18675

The Liberation of Belgrade. by S. S. Biryuzov, 24 pp.
RUSSIAN, per, Novaya i Noveyshaya Istoriya, No 1, 1963, pp 3-23.

JPRS 18500

Helicopters and Guerrilla Activities, by Milija Stanisic. SERBIAN, per, <u>Vojno Belo</u>, No 6, 1962, pp 21-32.

*ACSI I-2394 ID 2229436

Sociological

Sanitary Requirements for Children's Kitchens Issued by the Bulgarian Ministry of Public Health and Social Welfare, 8 pp. BULGARIAN, per, <u>Durzhaven Vestnik</u>, No 12, 12 Feb 1963, pp 3, 4.

JPRS 18230

Biographic Information on Three Eminent Medical Scientists, 6 pp. BULGARIAN, per, Khirurgia, Vol XV, No 12, 1962, pp. 1118-1122.

JPRS 18462

Establishing and Elementary Eighth-Grade School System in Bulgaria, by Sergey Yanev, 9 pp. BULGARIAN, per, Narodna Prosveta, No 1, 1963, pp. 4-11.

JPRS 18515

Some Problems in Subject Content and Organization in Bulgarian Secondary Labor Polytechnical Schools, by Dimitur Tsvetkov, 12 pp. BULGARIAN, per, Narodna Prosveta, No 1, 1963, pp 12-21.

JPRS 18515

The Organization and Operation of the Bulgarian Public Health System, by Petur Khristov, 14 pp. BULGAKIAN, per, Sreden Meditsinski Rabotnik, No 7, 1962, pp 3-13.

The Activity of the Health Workers' Trade-Union in Rumania, by L. Petrova, 5 pp. BULGARIAN, np, Zdraven Front, 2 Feb 1963, p 4.	JPRS 18515
Development and Problems of the Contraceptive Service in Slovenia, by Lidija Andolisek, 6 pp. CROATIAN, per, <u>Drustvo i Vaspitanje</u> , Vol XII, No 2, 1962, pp 41-44.	JPRS 18531
The Problem of Permitted Abortions, by Albinca Pecaver, 12 pp. CROATIAN, per, Drustvo i Vaspitanje, No 2, Jun 1962, pp 45-53.	JPRS 18531
Activity of the Sanitation Inspectorate, 10 pp. CROATIAN, per, <u>Jugoslovenski Pregled</u> , No 10, 1962, pp 403-405.	JPRS 18278
Regional Characteristics of the Primary School in 1960-1961, 16 pp. CROATIAN, per, Jugoslovenski Progled, No 10, 1962, pp 407-410.	JPRS 18278
Reform of the Advanced Schools, 10 pp. CROATIAN, per, Narodni Odbor, No 12, 1962, pp 717-722.	JPRS 18713
Problems of the New System of Distribution of Personal Income of University Instructors and Associates, by Stanko Miric, 8 pp. CROATIAN, per, Nova Administracija, No 10, 11, 1962, pp 847-855.	JPRS 18515
Organization of the Health Service in Yugoslavia, 5 pp. CROATIAN, per, <u>Privredai Pregled</u> , 24 Dec 1962, p 10.	JPRS 18195
Current Problems of Organization and Financing of Health Institutions, by Moma Markovic, 30 pp. CROATIAN, per, Socijalna Politika, No 11, 1962, pp 1023-1043.	JPRS 18429
Health Care and Economic Possibilities, by Dusan Jelkovic, 13 pp. CROATIAN, per, Socijalna Politika, No 11, 1962, pp 1073-1082.	JPRS 18429
Resolutions of the Sixth Plenary Session of the Central Committee of the Czechoslovak Red Cross, 5 pp. CZECII, per, Pracovnik, Vol X, No 2, 22 Jan 1963,	
pp 25-27.	JPRS 18515

Demographic Bases for Construction of Towns and Plants, by Vladimir Srb, Vladimir Wynnyczuk, 21 pp. CZECH, per, Statistika a Kontrola, No 12, 1962, JPRS 18230 pp 721-734. Measures for Raising the Level of Communist Upbringing at Universities, 18 pp. CZECII, per, Vysoka Skola, No 2, 1962-1963, JPRS 18073 pp 1-10. Hospital Stay -- an Important Index in Health Affairs, by K. Scheidler, 7 pp. GERMAN, per, Deutsche Finanzwirtschaft, No 24, Dec 1962, pp 57-510. JPRS 17888 Structure of Rural Property and Population -- a Contribution to the Population Geography of Mecklenberg, by Egon Weber, Greifswald, GERMAN, per, Petermanns Geographische Mitteilungen. Vol CVI, No 4, 15 Dec 1962, pp 241-252. JPRS 18550 Problems Connected With the Statistical Definition of Urban and Rural Population, by Georg Reimann, 8 pp. GERMAN, per, Statistische Praxis, Apr 1962, JPRS 18224 թթ 95-98. Polytechnical Higher Education in Czechoslovakia, by Karoly Heberger, 13 up. HUNGARIAN, per, Felsooktatasi Szemle, No 2, JPRS 18713 1963, pp 113-121. The People's Democratic State in the Stage of the Completion of the Building of Socialism, by I. Radulescu, C. Vlad, 21 pp. POLISH, per, Lupta de Clasa, No 12, 1962, pp 13-26. JPRS 18038 Need for Coordination of Scientific Research Work in Poland, by Waclaw Olszak, 5 pp. POLISH, per, Nauka Polska, No 4, 1958, pp 80-84. JPRS 18124 Data on Higher Education in People's Poland, POLISH, per, Nowe Drogi, Vol XVII, No 1 (164), 1963, pp 171-177. JPRS 18278

Employee Turnover a Problem With Serious Complications, by Antoni Gutowski, 5 pp. POLISH, per, Polityka, No 7, 16 Feb 1963, p 4.	JPRS 18515
The Teaching of Enterprise Economics, by Marian Pietraszewski, 6 pp. POLISH, per, Szkola Zawodowa, No 10 (223), 1962, pp 39-41.	JPRS 18278
Fifteen Years of Achievements in the Field of Education, by Ilie Murgulescu, 8 pp. RUMANIAN, np. Gazeta Invatamintului, Vol XIII, No 688, 28 Dec 1962, pp 1, 2.	JPRS 18073
The Role of the Guilty Party in Divorce Cases, by Tudor Popescu, 18 pp. RUMANIAN, per, Justitia Noua, No 9, 1962, pp 44-58.	JPRS 18195
Modern Scholasticism in Action, by P. Beraru, 20 pp. RUMANIAN, per, <u>Lupta de Clasa</u> , No 1, 1963, pp 63-76.	JPRS 18113
Speeches From the Session on Labor Safety Held in the Institute of Hygiene and Labor Safety, by V. Marinescu, G. Cadariu, et al, 12 pp. RUMANIAN, per, Muncitorul Sanitar, Vol XIV, No 1, 5 Jan 1963, pp 2, 3.	JPRS 18230
The Educational Function of the Family Under Socialism, by R. Popescu, 13 pp. RUMANIAN, per, Revista de Pedagogie, No 1, 1903, pp 25-36.	JPRS 18278
The Institute of Inframicrobiology of the Rumanian Academy, by Mignon Gruia, 6 pp. RUMANIAN, per, Sanatatea, Vol XI, No 2, 1963, pp 12, 13.	JPRS 18463
The Duties of Auditing Commissions in the Trade Unions, 8 pp. RUMANIAN, np, Munca, 1 Feb 63, pp 1, 2.	JPRS 18451
The Work of the Local Trade Union Councils in the Matter of Public Inspection, 7 pp. RUMANIAN, np, Munca, 8 Feb 63, pp 1, 2.	JPRS 18451

Problems of Popular Music Debated by the Music Council, 9 pp.

RUMANIAN, np, Scienteia, No 5817, 28 Feb 63, pp 3, 4.

JPRS 18436

Compensation by Insured Persons for Losses to the Funds of Social-Insurance Entities, by Milan Prelic, 10 pp. SERBIAN, per, Socijalna i Zdravstvena Politika, No 11, 12, 1962, pp 34-43.

JPRS 18531

Social Insurance for Athletes, 5 pp.
SERBIAN, per, Socijalna i Zdravstvena Politika,
No 11, 12, 1962, pp 83-86.

JPRS 18531

Biographic

Biographical Sketches of Bulgarian Hydrological Engineers, by Iliya Gadzhalski, 5 pp. BULGARIAN, per, Khidrotekhnika i Melioratsii, No 1, 1962, pp 31, 32.

JPRS 18320

Authors of Articles Appearing in Issue No 2 of Work of the Institute of Tele- and Radio-Engineering, 11 pp.
POLISH, per, Prace Instytutu Telei Radio-technicznego, Vol VI, No 2, 1962, pp 119, 120.

JPRS 18320

Biography of a Maser-Research Scientist, by Ryszard Dyja, 5 pp.
POLISH, per, Zolnierz Polski, No 8 (769), 1963, pp 16, 17.

WESTERN EUROPE

Economic

Helsinki and Its People, 55 pp. FINNISH, bk, Helsinkia ja Helsinkilaista, Encl No 1 ACSI I-4072 to R-293-61, OUSARMA, Finland, 1961, pp 8-283. (partial) ID 2189552

Helsinki's Traffic and Traffic Planning, by A. Koiva, 6 pp. RINNISH, per, Teknillinen Aikakuslehti, Vol LII,

No 16, 1962, pp 479, 480, 483, 514. (Call No. T4 T267)

Army Map Service Construction Work in the City of Helsinki, by

A. Lippa, 12 pp. FINNISH, per, Teknillinen Aikakuslehti, Vol LII, No 16, 1962, pp 488-493, 514.

A Modern Means of Economic Development and International Collaboration, by D. Guicciardi, 11 pp. ITALIAN, per, Tecnica Italiana, Vol XXIX, No 9, Nov 1962, pp 685-689. (Call No. T4 T24)

The Rationalization of General Cargo Traffic, 5 pp. NORWEGIAN, per, Nordisk Jarnbanetidskrift, No 12, 1962, pp 340-343.

Rationalization of Line Maintenance Work, 14 pp. NORWEGIAN, per, Nordisk Jarnbanetidskrift, No 12, 1962, pp 344-358.

Army Map Service

Army Map Service

ACSI I-2153-A ID 2227643

ACSI I-2153-B ID 2227643

Western Europe Political

And the state of t	
Dutch Dissident Communist Tells What's Wrong in the International Communist Movement, by Henk Gortzak, 12 pp. DUTCH, per, De Brug, Vol V, No 12, 26 Jan 1963, pp 4, 5.	JPRS 18063
Danish Communist Editor Analyzes the International Communist Movement Today, by Ib Norlund, 9 pp. DANISH, np, Land og Folk, 6 Feb 1963, pp 9-10.	JPRS 18063
Danish Communists Protest Chinese Demagoguery, by Svend Johansen, Gelius Lund, 7 pp. DANISH, np, Land og Folk, 6 Mar 1963, p 2.	JPRS 18452
Dutch Communist Wolff on the German Problem, by Jaap Wolff, 7 pp. DUTCH, np. De Waarheid, 2 Feb 1963, p 5.	JPRS 18063
Finnish Communist Party Remains Stalinist, 7 pp. FINNISH, np, Kansan Lehti, 23 Feb 1963, p 3.	JPRS 18452
Editorial States Finnish Communist Party Position, 5 pp. FINNISH, np, Kansan Uutiset, 5 Feb 1963, p 4.	JPRS 18063
Possibilities for the Finnish Loft-Wing Movement, 5 pp. FINNISH, per, <u>Tilanne</u> , No 1, Feb 1963, pp 61-65.	JPRS 18304
Selected Articles From the French Periodical Le Drapeau Rouge.	
11-14 Mar 1963. Belgian Communist Party Precongress Discussion Forum, 29 pp.	JPRS 18452
Vol XLI, No 51, 1963. Political Bureau Reacts to Ukkel Section Counterproposal: Let Us Avoid Any Party Split, 7 pp, (p 3).	JPRS 18427
Ukkel Section Criticizes Proposed Party Statute Amendments and Makes Counterproposal, 25 pp, (pp 3, 4).	
Innovation Cannot Justify Yielding Basic Principles, by M. Dologne, 6 pp, (p 4).	
Togliatti Took Part in Stalin's Crimes, 10 pp. FRENCH, per, Est & Quest, Vol XV, No 293, 1-15 Feb 1963, pp 6-10.	JPRS 18086

Wostern Europe Political (Contd)

What Era of Communism Is This?, by Charles Haroche, 7 pp. FRENCH, por, France Nouvelle, No 900, 16-22 Jan 1963,	
pp 11, 12.	JPRS 18210
The New Communist Generation, by Andre Delcroix, 6 pp.	
FRENCH, per, France Observateur, Vol XIV, No 669, 28 Feb 1963, pp 6, 7.	JPRS 18201
French Communist Students Protest News Coverage of Their Congress, 12 pp. FRENCH, np, L'Humanite, No 5762, 7 Mar 1963, p 6; No 5763, 8 Mar 1963, p 6; No 5764, 9 Mar 1963, p 5. The De Gaulle-Adenauer Pact, by Klaus Mehnert, 8 pp.	JPRS 18452
GERMAN, per, Christ und Welt, Vol XVI, No 8, 22 Feb 1963.	JPRS 18077
Switzerland: Soviet-Chinese Talks in Peking, 5 pp. GERMAN, np, Noue Zuercher Zeitung, 25 Feb 1963, p 2.	JPRS 18143
The Current Political Situation in Italy, 12 pp. GERMAN, np, Noue Zuercher Zeitung, 10 Mar 1963, p 2.	JPRS 18735
West German Press Service News Briefs from East Berlin, 7 pp. GERMAN, np, Ostspicgol, 12 Mar 1963, pp 1-4.	JPRS 18666
The SED This Side of the Wall Reorganization of the Socialist Unity Party in West Berlin, by Karl Wilhelm Fricke, 10 pp. GERMAN, per, SEZ Archiv, No 24, Dec 1962, pp 373-376.	JPRS 18568
Socialism in Fits and Starts: Some Ideological Aspects of the SED Policy Program, by Hans Schimanski, 13 pp.	
GERMAN, per, SBZ Archiv, No 24, Dec 1962, pp 377-380.	JPRS 18568
Guardians of Socialist Morals Conflict Commissions in Zone Labor Life, by Rudolf Walter, 14 pp. GERMAN, per, SBZ Archiv, No 3, Feb 1963, pp 34-37.	JPRS 18545
Austrian Communist Editor Discusses Problems of the International Communist Movement, by Franz Marek, 27 pp. GERMAN, per, Weg und Ziel, No 2, 1963, pp 81-108.	JPRS 18063
On the Trail of Wolfgang Harich, by Hobert Neumann,	
12 pp. GERMAN, np, Die Zeit, 1 Mar 1963, p 5.	JPRS 18262

Western Europe Political (Contd)

The Italian Communist Role in the Sino-Soviet Dispute -- An Italian Socialist Analysis, by Antonio D'Ambrosio, 18 pp. ITALIAN, per, Corrispondenza Socialista, Vol IV, JPRS 18063 No 1, 1963, pp 5-9. A Socialist Analysis of the Tenth Italian Communist Party Congress, by Faderico Coen, 14 pp. ITALIAN, per, Mondo Operaio, No 11, 12, 1962, JPRS 18063 pp 7-10. A Socialist View of Labor Unity in Italy, by Enzo Bartocci, 12 pp. ITALIAN, per, Mondo Operaio, No 11-12, 1962, JPRS 18063 pp 26-29. Italian CGIL Official Discusses Worldwide Trade Union Unity, by Mario Dido, 6 pp. ITALIAN, np, Rassegna Sindacale, No 5, 9 Feb 1963, p 24. JPRS 18304 Italy: Luigi Longo on Problems of Unity, 5 pp. ITALIAN, np. L'unita, 24 Feb 1963, p 3. JPRS 18143 Norwegian Communist Party Issues Draft Program, by Hans I. Kleven, 5 pp. NORWEGIAN, np, Friheton, 1 Feb 1963, p 10. JPRS 18063 Swedish Communist Karlsson Reviews Soviet and

Military

Chinese Stands, by Erik Karlsson, 5 pp. SWEDISH, np. Ny Dag, 16 Feb 1963, p 2.

Training Manual and Directives for Use of Light
Weapons, 16 pp.

FINNISH, bk, Kevyden Aseiden Kasittely-Ha
ACSI I-8137
Ampumakoulutusopas, 1958.

Anti-Personnel Mine, Detectable at Will Model 1956

JPRS 18143

(Mi AP DV 56)
FRENCH, document, Encl to ID 2186250

Technical Instructions for the Employment of

Metallic, Electromagnetic Anti-Tank Tilt Rod Fuze
(Models 1954 and 1957 (Ab Ac Me 54 and Ab Ac Me 57).

Army Materiel FRENCH, document, Encl to ID 2186250

Command

Western Europe Military (Contd)

Technical Instructions for the Employment of the Metallic Shaped Anti-Tank Mine (Mi AC M CC 56). FRENCH, document, Encl to ID 2186250.

Army Materiel Command

Frederal Civil Defense Law (Dated 23 March 1962). FRENCH, pamphlet, Loi Federale sur la Protection Civile (du 23 Mars 1962), 1 Oct 1962, pp 1-26.

*ACSI I-2407 1D 2229443

Can the Riflemen Carry a Lighter Load?, by Barjaud, 7 pp. FRENCH, per, 1'Armee, Dec 1962, pp 49-57.

ACSI I-8286 ID 2224773

Experimental Maneuver of a Clothing Supply and Maintenance Company, by Guy Vallet. FRENCH, per, Revue de l'Intendance Militaire, No 44, 1957, pp 6-16.

Army Materiel Command Tr Log No 107

Explosives and Fuse Materials, 18 pp. SWEDISH, bk, Sprang-och Tandmedel, 1961, pp 7-32.

ACSI I-8138 ID 2216557

Geographic

Finland and Finmarken, by R. C. Hekker, 18 pp. DUTCH, per, Bouw, Jul-Dec 1955, pp 830-834, 837-844. (Call No NA6 B6)

Army Map Service

A New Map of the Alpine Countries, by Ed. Imhof, 28 pp.
DUTCH, per, Goographica Helvetica, 1959, pp 65-76.

Army Map Service

Sociological

The German Spitzbergen Expedition in 1962, by W. Pillewizer.
GERMAN, per, Petermanns Geographische Mitteilungen, Vol CVI, No 4, 15 Dec 1962, pp 286.

AFRICA

Economic

Modernization and Expansion of the Main Lines of Telecommunication in Africa and Madagascar, by J. Bidaut, 24 pp. FRENCH, per, Industries et Travaux d'Outremer, No 108, Nov 1962, pp 871-884. (Call No. HC279 142)

Army Map Service

Some Aspects of Algeria's Economic Substructure, by Jean-Francois Troin, Raymond Laurent, 20 pp. FRENCH, per, Mediterrance, 1962, pp 53-68.

Army Map Service

Military

Liquidation of the Military Bases, 5 pp. ARABIC, np. al'Alam, 22 Jan 1963.

AF IR 1865000163

Sociological

Evolution of the Saharan Peoples, by Michel Lesourd, 14 pp. FRENCH, per, 1'Afrique et 1'Asie, No 57, 1962, pp 11-26.

JPRS 18060

MIDDLE EAST

Economic

The Mineral Oil Industry of India, by Wilholm von Pochhammer, 14 pp.
GERMAN, per, Erdol und Kohle/Erdgas/Petrochemie, Vol XV, No 12, 1962, pp 1017-1019. (Call No. TN860.E67)

Army Map Service

Plenary Meeting of Histadrut Executive Committee Concerning the Wage Policy for 1963, 63 pp. HEBREW, np, <u>Davar</u>, 10 Jan 1963, pp 5-9.

JPRS 18101

Unsuccessful Merger of Mispanut Isreal and Hayamah Ship Companies, by Nahum Pundak, 15 pp. HEBREW, np, Davar, 1, 5, 8 Feb 1963, p 3, 4.

JPRS 18651

Text of Israeli-Cuba Trade Agreement, 11 pp. SPANISH, per, Gaceta Oficial, 23 Nov 1962, pp 14029-14031.

Middle East Political

Israeli Communist Party Formulates 1963 Plan, by Shamuil Mikunis, 6 pp.
ARABIC, np. Al Ittihad, No 81, 19 Feb 1963, pp 2, 3.

JPRS 18063

Progress of the Cyprus Communist 1962 Organization Plan, by G. Katsourides, 10 pp. GREEK, per, Neos Dimokratis, No 11, Dec 1962, pp 19-22.

JPRS 17904

Labor Unity -- Ideological Issues, by Tsvi Shaluakh, 5 pp.
HEBREW, np. Davar, 7 Feb 1963, p 3.

JPRS 18651

Military

The Irainian Navy and the Persian Golf. FRENCH, per, La Revue Maritime, No 192, Oct 1962, pp 1181-1198.

*Navy Trans 3334 ONI 907

FAR EAST

Economic

Collection of Fiscal Laws and Regulations 1958-1960. (DC-8546c) CHINESE, monograph, Chin-jung Fa-kuei Hui-pien, Peiping, Apr 62, pp 15-320. *JPRS A Regional Stratigraphic Table of China, 511 pp. CHINESE, bk, Chung-kuo Chu-yu Ti-ts'en Piao, Peking, 1958, pp 1-190. JPRS 18539 Natural Conditions in the Sinkiang Uighur Autonomous Region, by E. M. Murzayev, Chou Li-san, 451 pp. CHINESE, monograph, ilsin-chiang Wei-wu-erh Tzu-chih-ch'u Te Tzu-jan T'iao-chien, 1959, pp 4-13, 30, 60-70, 84, 92, 102-104, 106, 107, 109, 110, 112, 123, 130-149, 173-226. JPRS 18689 Commercial Accounting, Part XV. (DC-8546a) CHINESE, monograph, Shang-yeh K'uai-chi Ho-suan, Peiping, Mar 62, Part XV, 464-493. *JPRS Business Finance. (DC-8546b) CHINESE, monograph, Shang-yeh Ts'ai-wu, Peiping, Mar 1962, pp 5-263, *JPRS On the Study of Dialectical Problems in Capital-. by Wu Ch'uan-ch'i, 32 pp. CHINESE, per, Che-hsuch Yen-chiu, No 6, 25 Nov 1962, pp 1-19. JPRS 18079 Standardization of the Specifications of Bricks, by Li Ch'un-ling, 18 pp. CHINESE, per, Chien-chu !!such-pao, No 1, 1962, pp 14-16. JPRS 18168 Selected Plans of Residential Houses, 63 pp. CHINESE, per, Chien-chu Hsueh-pao, No 5, 6, 1962, pp 25-35, 37, 38. JPRS 18168 Strengthen Business Management of Production Teams. by Lin I-chou, 10 pp. CHINESE, per, Hung-ch'i, No 2, 23 Jan 1963. JPRS 18205 Raise Industry's Work of Supporting Agriculture to a Still Higher Level, by Hsu Hsin-hsuch, 10 pp. CHINESE, per, Hung-ch'i, No 2, 23 Jan 1963. JPRS 18205 Fully Develop The Role of Crops of Good Breed to Increase Production, by Tai Sung-en, 18 pp. CHINESE, per, Hung-ch'i, No 2, 23 Jan 1963. JPRS 18205 Far East Economic (Contd)

Years of Reconstruction: New Guinea from 1949 to 1961, by C. S. I. J. Lagerberg, 193 pp.

DUTCH, bk, Jaren van Reconstructie-Nieuw Guinea van
1949 to 1961, 'S-Hertogenbosch, 1962, pp 1-205, 228-232.

JPRS 18155

North Korean Train and Route Schedules for 1963, 12 pp. KOREAN, bk, Kyot'ong Ch'ulp'ansa.

JPRS 18319

Selected Articles From the Korean Periodical Kulloja.

No 17, Oct 1962, pp 46-48. Control Through the Won, by Han Pyong-op, 6 pp. JPRS 18103

No 19, Nov 1962. Construction of an Independent National Economy in Our Country, by Yi Song-nim, 17 pp. (pp 8-18).

JPRS 18103

Several Problems Concerning the Enhancing of the Economic Efficiency of Capital Construction Investment, by Pak Chong-gyu, 12 pp, (pp 35-41).

No 20, 1962. The Superiority and Vitality of the New System of Guidance in Agriculture, by Lee Sok-nok, 30 pp, (pp 26-38). JPRS 18229

Agricultural Production and the Forces of Change, by Chong Yon-uk, 9 pp, (pp 45-47).

No 21, 1962. The Influence of Commerce Over Production, by Lee Sang-son, 15 pp, (pp 34-39).

JPRS 18229

Practical Science and Industry, by Loo Pong-hyon, 10 pp, (pp 40-43).

Establish Agriculture on Scientific and Technical Foundation, by Kim Man-kum, 6 pp. KOREAN, np, Nodong Sinmun, 6 Jan 1963, p 2.

Far East Economic (Contd)

Selected Articles From the Vietnamese Newspaper Nhan Dan.

Nhan Dan.	
9 Jan 1963, p 3. Using Materials Economically, by Ha Van, 5 pp.	JPRS 18048
10 Jan 1963, p 2. Let Us Struggle to Make Agriculture the Basis of Industrial Development, by N. T., 5 pp.	JPRS 18667
12 Jan 1963, p 3. Let Us Evaluate the Development of Heavy Industry, by Nguyen Van Tran, 6 pp.	JPRS 18667
14 Jan 1963, p 2. Let Us Actively Prepare for the Campaign for Cooperative Management and Technical Improvement as a Means to Develop Agriculture, 7 pp.	JPRS 18667
18 Jan 1963, p 3. Let Us Build Many Water Resource Works, by Ha Ke Tan, 8 pp.	JPRS 18667
21 Jan 1963, p 2. Measures Against Drought, by La Xuan Dinh, 5 pp.	JPRS 18667
Plant and Harvest the Winter Spring Crop on Schedule, by Huu Duc, 5 pp. VIETNAMESE, per, Thoi Su Pho Thong, No 22, Nov 1962, pp 5-9.	JPRS 18667
Political	
Take Warning from the Past in Order To Be More Careful for the Future, Treat Illness in Order to Save the Patient, by Li Chien-wei, 10 pp. CHINESE, per, Hung-ch'i, No 2, 23 Jan 1963.	JPRS 18205
What Are the Basic Issues in Sino-Soviet Dispute, by Branko Lazitch, 6 pp. FRENCH, per, Est & Quest, Vol XV, No 292, 16-31 Jan 1963, pp 3-6.	JPRS 18086
Cambodia's Relations with Its Neighbors An Analysis, by Norodom Sihanouk, 43 pp. FRENCH, np, Realities Cambodgiennes, 15 June-27 July, 1962.	JPRS 18537
Let the Dog Bark, Continue to Advance, 33 pp. INDONESIAN, np, Harian Rakjat, 5, 7 Jan 1963, p 2.	JPRS 18025

Far East
Political (Contd)

Selected Articles From the Korean Periodical Kulloja.

No 12, 1962, pp 15-20. Let Us Further Strengthen Our Revolutionary Position, 9 pp.

No 17, Oct 1962. Significance of Party Work Specialization and General Harmony of Party Life in Strengthening Party Life, by Choo Sung-hun, 8 pp. (pp 13-17).

To Strengthen the Theory Learning of the Leaders, 8 pp, (pp 18-22).

Cadres Ideological Study and Party Committee of the Ministry, by Kim Ch'ol Hun, 15 pp, (pp 23-28).

No 18, Nov 1962. The Koreans Must Fight, 7 pp, (pp 34-37).

Let Us Lift Higher the Banner of the October Revolution, 8 pp, (pp 38-43).

The Holy Family: On the Publication of Works of Marxism-Leninism, Vol II, 8 pp, (pp 44-48).

No 19, 1962, pp 19-29. The Most Legitimate and Rational Method of the Unification of the Fatherland, by Kang Yong-tak, 19 pp.

No 20, 1962. Some Types of Problems Arising in Party Thought Indoctrination Work, by Pak Ki-son, 24 pp, (pp 2-9).

The Total Accomplishment of Our Party's Mass Line in the Establishment of Socialism, by Kim Il-song, 22 pp, (pp 10-15).

The Taean System in Industrial Management, by Lim Su-ung, 18 pp, (pp 17-25).

No 21, 1962. Shining Victories -- Fighting Tasks, 14 pp, (pp 9-14).

The Historical Significance of the Fifth Plenary Conference in the Strengthening and Expansion of the Organization and Ideology of Our Party, 12 pp, (pp 21-25).

JPRS 18102

JPRS 18102

JPRS 18228

JPRS 18102

Far East Political (Contd)

Let Us Carry Through the Ten Great Tasks and Streng- then the Popular Line of the Party, by Han Yong-kun, 5 pp. KOREAN, np, Nodong Sinmun, No 36, 3 Feb 1963, p 2.	JPRS	18285
The Lofty Principle of Democratic Centralism, 6 pp. MONGOLIAN, per, Namyn Am'dral, Nov 1962, pp 3-7.	JPRS	18255
Comrade Tsedenbal's Opening Speech at the 8 January Session of the National Conference of Ideological Workers, 34 pp.		
MONGOLIAN, np, Unen, 9 Jan 1963, pp 1-4.	JPRS	18025
Speech Strosses Ideological Education, by L. F. Ilyichev, 5 pp. MONGOLIAN, np. Unen, 16 Jan 1963, pp 1, 2.	TDDS	18025
Mondonial to our 1909, pp 1, 2.	01110	10025
Chinese Communist Party's Determination to Safeguard Unity, 5 pp.		
VIETNAMESE, up, Nhan Dan, Jan 21, 1963, p 4.	JPRS	18025

Military

Self Defense Force Yearbook for 1963. JAPANESE, bk, <u>Jietitai Nenkan</u> , Tokyo, 1962, pp 195-198, 200-209, 214-220, 249-252, 412, 413.	*ACSI I-2510 ID 2224081
Eighteenth Anniversary of the Establishment of the Vietnamese People's Army: and Combat Readiness, 7 pp.	
VIETNAMESE, np. Quan Doi Nhan Dan, No 1138, 15 Dec 1962, pp 1, 2.	JPRS 18135

Far East Geographic

Geographic	
A Report on the Coordinated Research on the Desert Region, 351 pp. CHINESE, rpt, Sha-mo Ti-ch'u Ti Tsung-ho T'iao-ch'a Yen-chiu Pao-kao, Peiping, No 1, 1958, pp 1-108.	JPRS 18658
A Report on the Coordinated Research on the Desert Regions, by M. P. Petrov, 222 pp. CHINESE, rpt, Sha-mo Ti-chu Ti Tsung-ho T'iao-ch'a Yen-chiu Pao-kao, Peiping, No 2, 1958, pp 1-82.	JPRS 18178
Our Country's South Sea Archipelagoes, by Wu Han,	
36 pp. CHINESE, bk, Wo-kuo Ti Nan-hai Chu-tao, Chapters 1-7, 1962, pp 1-32.	JPRS 18424
Preliminary Studies on Frozen Earth on the Tsinghai- Tibetan Plateau, by Chou Yu-wu, Tu Yung-huang, 16 pp. CHINESE, per, K'o-hsueh T'ung-pao, No 2, 1963, pp 60-63.	JPRS 18511
Six Thousand Kilometers Traveled in the Mongolian People's Republic, by V. A. Aprodov, 149 pp. RUSSIAN, bk, 6000 Kilometrov po Mongol'skoy Narodnoy Respublike, Moscow, 1962, pp 1-208.	JPRS 18472
West Irian, by I. A. Zavodskiy, 32 pp. RUSSIAN, pamphlet, Zapadnyy Irian, Moscow, 1962, pp 1-32.	JPRS 18358
Sociological	
Women's Personal Problems Must Be Handled as an	
Important Issue, 15 pp. CHINESE, per. Chung-kuo Fu-nu, No 12, 1962, pp 1-4.	JPRS 17991
Hsien Women's Federation Director Loved and Respected	
by the Masses, 10 pp. CHINESE, per, Chung-kuo Fu-nu, No 1, 1963, pp 3, 4, 9.	JPRS 18158
Buddhist Associations Formed Many Conferences, 6 pp. CHINESE, per, Hsien-tai Fo-hsueh, No 6, 13 Dec 1962,	
pp 39-41.	JPRS 18158

Far East Sociological (Contd)

Selected Articles From the Korean Periodical Kulloja.

No 17, Oct 1962. JPRS 18102 The Unity of the Party and the People, 13 pp, (pp 2-5).Our Party's Great Victory in Public Health Policy, by Ch'oe Chang-sok, 20 pp, (pp 6-12). JPRS 181G2 No 19, 1962. Socialist Revolution and Self-Revival, 14 pp, (pp 2-7).The Five-Family Systom in the Mass Political Indoctrination, by Ch'oe Song-gun, 9 pp. (pp 30-34). JPRS 18285 No 1, 1963. Reading and Discussion in Study, by Kang Pyong-sik, 7 pp, (pp 12-15). The Taean System and the Formation of the New Man, by Yi Song-gun, 9 pp, (pp 16-20). The Significance of the Korean-Language Dictionary in the Cultural History, by Kim Pyong-je, 15 pp, (pp 32-38). Toward Higher Level of Political, Technical and General Knowledget, by Pak Chong-ttack, 13 pp. KOREAN, np, Nodong Sinmun, No 32, 1 Feb 1963, p 2. JPRS 18285 More Good Work in Veterans Affairs, by To Quang Dau, 5 pp. VIETNAMESE, np, Nhan Dan, 3 Jan 1963, p 2. JPRS 18139 Our Literature Must Struggle to Understand Fully Party Guidelines and to Keep Pace with Life, by Nguyen Dinh Thi, 8 pp. JPRS 18139 VIETNAMESE, np, Nhan Dan, 10 Jan 1963, p 3. The Quy Mao Spring, by Pham Van Dong, 8 pp. VIETNAMESE, np, Nhan Dan, 25 Jan 1963. JPRS 18052

Par East Biological

The Problem of the Birth-Year of Genghis Khan, by Shao Hsun-cheng, 6 pp. CHINESE, per, Li-shih Yen-chiu, No 2, 1962, pp 133-137.

JPRS 18282

About Genghis Khan, by Han Ju-lin, 12 pp. CHINESE, per, Li-shih Yen-chiu, No 3, 1962, pp 1-10.

JPRS 18282

Concerning Conghis Khan, by Chou Liang-hsiao, 10 pp. CHINESE, per, Li-shih Yen-chiu, No 4, 1962, pp 1-7.

JPRS 18282

LATIN AMERICA

Economic

pp 1-7.

Water Management of Cuba, by J. Janota, 9 pp. CZECH, per, Vodni Hospodarstvi Kuby, No 1, 1963, pp 11-14.

ACSI 1-2354 ID 2229425

Experiment in Transporting Unpackaged Raw Cane Sugar From Cuba to the USSR, by M. B. Yarmolinskiy, M. A. Brenman, 9 pp.
RUSSIAN, per, Sakharnaya Promyshlennost, No 1, 1963, pp 11-14.

JPRS 17972

In the National Telephone Corporation of Venezuela, 21 pp.
SPANISH, rpt, Memoria y Cuenta del Ministerio de Comunicaciones Presentada al Congreso Nacional en sus Sesiones Ordinarias de 1962, Chapter XIII, 1962,

ACSI I-2205-B ID 2218851

Cuba's 1963 Budget, 9 pp. SPANISH, per, Bohemia, No 5, 1963, pp 84-89.

JPRS 18758

Hydroclectric Power Plant Completed, by Rafeal Sanchez Lelebret, 6 pp. SPANISH, per, Bohemia, No 11, 1963, pp 4-8.

JPRS 18758

Mexico - Monterrey - San Antonio Micro-Wave System, by R. Gallardos, 9 pp. SPANISH, per, Comunicaciones y Transporte, No 19, Jul-Aug 1962, pp 35-42. (Call No. 187 C74)

Army Map Service

By-Laws of the National Educational Workers' Labor Union, 20 pp. SPANISH, per, Gaceta Oficial, 23 Oct 1962, pp 12943-12946.

Latin America Economic (Contd)

ECONOMIE (CONTA)	
The 1962 Cuban National Budget, 28 pp. SPANISH, per, Gaceta Oficial, 29 Nov 1962, pp 14253-14262.	JPRS 18074
New Housing for Camaguey Agricultural Workers, by Rogelio Gutierrez, 7 pp. SPANISH, np, Hoy, Vol XXV, No 67, 1963, pp 4, 5.	JPRS 18640
Rules on Payment for Productivity Increases, 8 pp. SPANISH, np, Hoy, 8 Feb 1963, p 7.	JPRS 18232
Blas Roca Outlines Economic Tasks, by Blas Roca, 13 pp. SPANISH, np, Hoy, 22 Feb 1963, p 10.	JPRS 18232
Methods Established for Better Use of Motor Oils, 8 pp. SPANISH, np, El Mundo, Vol LXI, No 20,576, 15 Feb 1963, p 8.	JPRS 18082
Political	
Fidel Castro Speech to Women's Congress, 15 pp. CHINESE, per, Hung-ch'i, No 2, 1963.	JPRS 18205
ANAP General Manager Speaks, 6 pp. SPANISH, per, ANAP, No. 11 12, 1962, pp. 15, 16.	JPRS 18758
The Difference Between the Terms "State" and "Government", 5 pp. SPANISH, np, Hoy, 5 Feb 1963, p 2.	JPRS 18162
Regulations for Organization of Socialist Competition, 18 pp. SPANISH, np, Hoy, 8 Feb 1963, pp 6-8.	JPRS 18232

Geographic

Ist Section: General Terrain Distribution - Orography;
IInd Section: Hydrography, by Henri F. Pittier.
GERMAN, rpt, Kostarika Beitrage zur Orographie und
Hydrographie, 20 Jul 1912, pp 7-39.

*ACSI I-2289
ID 2229407

Latin America Sociological

Selected Articles From the Spanish Newspaper $\underline{\text{Hoy}}$.

	
15 Feb 1963, p 2. Classes in Travel Are Not Social Distinctions, 5 pp.	JPRS 18162
17 Feb 1963. Public Health Data, 5 pp.	JPRS 18144
New Pre-Med Center Opened, 5 pp, (p 7).	
22 Feb 1963, p 5. Medical Round Table Discusses Infant Mortality in Latin America, by Susana Lee, Rolando Valdos Marin, 6 pp.	JPRS 18232
19 Mar 1963, p 5. First Medical-Stomatological Congress in Revolutionary Cuba, by Jose Solis, J. R. Fernandez Pons, 11 pp.	JPRS 18162
Higher Institute on Nerve Activity Inaugurated, by Edelmiro S. Castellanos, 7 pp. SPANISH, np, El Mundo, 23 Dec 1962, p 4.	JPRS 18144
Activities at Tenth Medical Congress, 10 pp. SPANISH, np. El Mundo, Vol XLI, No 20,579, 19 Feb 1963, pp 1, 6.	JPRS 18082
Medical Congress in Havana, 17 pp. SPANISH, np, Revolucion, 19 Feb 1963, p 1, 5.	JPRS 18144
Proceedings of Cuban Medical Congress: Discussion of Health in USSR, 5 pp. SPANISH, np, Revolucion, No 2194, 22 Feb 1963, p 5.	JPRS 18232
	0110 10232

NORTH AMERICA

Economic

The Supply of Coal in Mines in the United States of America, 11 pp.
GERMAN, rpt, Untersuchung uber die Entwicklung der Gegenwartigen und Zukunftigen Struktur von Angebot und Nachfrage in der Energiewirtschaft der Bundesrepublik unter Besonerere Berucksichtigung des Steinkohlenbergbaus, 1962, pp 112-121.

Army Map Service

Political

Contradictions in Kennedy's Messages to Congress, by Sakai Kozo, 12 pp.

JAPANESE, np, Akahata, 3, 4 Feb 1963, p 5.

JPRS 18255

Learn Thoroughly the Guidelines of International Communism; Strengthen United Opposition to the Imperialist Warmongers Led by the United States, 10 pp. VIETNAMESE, np, Quan Doi Nhan Dan, No 1134, 6 Dec 1962, pp 1, 4.

JPRS 18135

Geographic

Glaciological Expedition in Greenland, by Albert Bauer. FRENCH, bk, Expedition Glaciologique Internationale au Groenland, Mesures au Tellurometre Groenland, 1959, No 12, 1961.

ACTO

WORLD WIDE

Political

Problems in Anti-Imperialist, Democratic Struggles of Newly Independent Nations, by Sakaki Toshio, 9 pp. JAPANESE, np. Akahata, 2 Feb 1963, p 5.

JPRS 18135

World Communist Movement is Most Influential Political Force in Modern Era, 6 pp.
MONGOLIAN, per, Namyn Am'dral, Nov 1962, pp 61-65.

SCIENTIFIC

Aerospace

High Speed Aerodynamics Principles of Aircrafts Gas Dynamics, by A. P. Mol'nikov. RUSSIAN, bk, Aerodinamika Bol'shikh Skorostei Osnovy Gazadinakmiki Letatel'nykh Apparatoy,	
Voyenizdat, Moscow, Chapters V, VI, 1961.	*FTD-TT-63-394
Physical Principles of Rocket Flight, by A. A. Dmitriyevskiy, V. N. Koshevov. RUSSIAN, bk, Fizicheskiye Osnovy Poleta Raket,	
Series za Voyenno-Tekhnicheskiye Zhaniya Raketnaya Tekhnika, Moscow, 1962, 77 pp.	*FTD-TT-63-345
Construction of Aircraft Gas-Turbine Engines, by A. V. Shtoda. RUSSIAN, bk, Konstruktsiya Aviatsionnykh Gazoturbinnykh Dvigateley, Moscow, 1961, 411 pp.	*FTD-TT-63-405
Rockets and Interplanetary Flights, by B. V. Lyapunov.	"FID=11=05=405
RUSSIAN, bk, Rakety i Mexhplanetnyye Polety Moscow Voyen Izd-Vo M-Va Obor SSSR Nauchno-Populyarnaya Biblioteka Voyennogo Izdatel stva, 1962.	*FTD-TT-63-210
Modern Means for Emergency Escape From an Aircraft, by S. M. Alekseyev, Ya. V. Balkind, et al. RUSSIAN, bk, Sovremennyye Sredstva Avariynogo	
Pokidaniya Samoleta, Moscow, Chapter 1, 9, 10, 1961, pp 5-23, 307-407, 408-431.	*FTD-TT-63-420
Radio Investigations of the Structure of the Ionosphere by the Kosmos, Artificial Earth Satellites at Coherent Frequencies, by Ya. L. Al'pert, V. B. Belyanskiy. RUSSIAN, per, Geomagnetizm i Aeronomiya, No 1, 1963.	*FTD='TT-63-443
Radio Communication Conditions in the High and Middle Latitudes, by Ye. Ye. Goncharova, M. V. Kiseteva.	
RUSSIAN, per, Geomagnetizm i Aeronomiya, No 1, 1963, pp 94-103.	*FTD-TT-63-443
Moment of Inclination of Plane Wings With Skew Blowing by Supersonic Gas Flow, by Yu. I. Krasil'nikov. RUSSIAN, per, Inzhenernyy Sbornik, Ak Nauk SSSR, Institut Mekhaniki, No 29, 1960.	*FTD-TT-63-402
A Rocket Carrier Goes to the Firing Range, by V. Belikov, 6 pp.	
RUSSIAN, np, Izvestiya, No 239 (14093), 7 Oct 1962, p 6. 9680135	FTU-TT-63-97

Scientific Aerospace (Contd)

Aexospace (Contd)	
Cosmonaut Pilots, by V. Belnikov. RUSSIAN, np, <u>Izvestiya</u> , No 59, 10 Mar 1963, p 6.	*FTD-TT-63-419
Turbulent Circular and Plane Gas Jets in Counter- current Gas Stream, by E. Timma. RUSSIAN, per, Iz Ak Nauk Estonskoy SSR, Vol XI, No 4, 1962, pp 253-262.	*FTD-TT-63-372
The Mixing of Jets in a Channel With Variable Cross-Section, by O. V. Yakovlevskiy, 13 pp. RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Tekh Nauk, Mekh i Mash, No 1, 1962, pp 66-72. 9679874	FTD-TT-62-1571
In the Selection of the Relative Magnitude of the Critical Section of the Nozzle for a Liquid Fuel Combustion Chamber, by O. I. Kudrin. RUSSIAN, per, Iz Vysshikh Ucheb Zaved, Aviat Tekh, No 3, 1958, pp 78-88.	*FTD-TT-63-417
Certain Variational Problems on the Interaction of Systems, by G. I. Kostychev. RUSSIAN, per, Iz Vysshich Uchebnykh Zaved Aviat Tekh, No 3, 1962.	*FTD-TT-63-401
Optimality of Multistage Rockets, by O. F. Makarov. RUSSIAN, por, Iz Vysshikh Ucheb Zaved, Aviat Tekh, No 4, 1962, pp 18-26.	*FTD-TT-63-427
Cosmos, Medicine, Man, by V. V. Parin, 5 pp. RUSSIAN, np, Komosomol Pravda, 10 Mar 1961, 1 p. 9679895	FTD-TT-62-1603
Cosmos - Earth, by V. V. Parin, 7 pp. RUSIAN, per, <u>Ogonok</u> , No 17, 1961, pp 26, 27. 9679885	FTD-TT-62-1609
The Polarization of the Cygnus A Radiogalaxy, by V. I. Slysh. RUSSIAN, per, Priroda, No 11, 1962, pp 106, 107.	*AFCRL Res Lab
Man in Cosmos, by V. V. Parin, 10 pp. RUSSIAN, per, <u>Smena</u> , No 13, 1961, pp 22, 23. 9679890	FTD-TT-62-1606
Aerodynamic Heating Problems in Hypersonic Flight, by V. Votyakov, V. Shumyatskiy. RUSSIAN, np, <u>Sovetskaya Aviatsiya</u> , 14 Apr 1962, p 2.	*FTD-TT-63-390
An Investigation and Aerodynamic Perfecting of Cascades of Profiles in the Last Stage of the S. M. Kirov KhTGZ K-300 -240 Turbine, by M. I. Zhukovskiy, N. A. Sknar. RUSSIAN, per, Teploenergetika, Vol IX, No 4, 1962,	
pp 32-36.	NLL M 3918

Scientific Acrospace (Contd)

Infrared Technique in Space, by A. Sergeyev. RUSSIAN, np, <u>Trud</u>, No 56 (12855) 7 Mar 1963, p 3.

*FTD-TT-63-444

Flow of a Hypersonic Stream Around an Axisymmetric Body Flying Below the Angle of Attack, by V. B. Minestsev. RUSSIAN, per, Trudy Fiziko-Tekhnicheskiy Institut, 1961.

*FTD-TT-63-406

Selected Articles From the Russian Periodical Vestnik Leningrad Univ, Ser Matem Mekh i Astron, No 7/2, 1961.

*FTD-TT-63-392

A Conic Section Wing in a Supersonic Flow, by Λ . A. Avdonin, (pp 62-74).

An Approximate Analytical Solution of Non-Vertical Equations of Supersonic Flow Around Developable Wings, by I. A. Popova, (pp 87-104).

An Analytical Solution of a Supersonic Flow Around a Lattice of Conic Airfoils, by N. V. Smirnov, (pp 105-116).

Space: USSR vs. USA, 5 pp.
RUSSIAN, np, Vodnyy Transport, Aug 4, 1962, p 3.
9679899

FTD-TT-63-43

How the Flight Was Readied, by V. V. Parin, 7 pp. RUSSIAN, por, Zdorov'ye, No 6, 1961, pp 4, 5. 9679879

FTD-TT-62-1608

Interaction of Analysors During Flight on Board Aircraft and Space Vehicles, by V. V. Baranovskiy, M. D. Yomel'yanov, 11 pp.
RUSSIAN, per, Zhurnal Vysshey Nervnoy Deyatel'nosti imeni I. P. Pavlova, Vol XII, No 6, 1962, pp 1001-1010.

JPRS 18315

Training for Flight Into Cosmos, by V. V. Parin, 7 pp. RUSSIAN, per, Znaniye Sila, No 4, 1961, pp 23, 24. 9679871

FTD-TT-62-1610

Radio Communication of the Mars I Interplanentary Station.

CZECH, np, Prace Central Council of Trade Union Praha CSSR, 7 Nov 1962, p 5.

*FTD-TT-63-395

Scientific Aerospace (Contd)

No Gains Without Pains, Mars 1, by Zdenek Dobrichovsky, CZECII, per, Veda Technika Mladezi, No 26, 1962, pp 915-917. 9668365 FTD-TT-63-131 Energa 75-mm Super Rocket Launcher, 5 pp. FRENCH, rpt, Le Super-Blindicido "Energa" de 75 mm, ACSI I-2379 Brussels, Belgium, 13 pp. ID 2229428 Hovercraft Performance Appraisal, by B. J. Hurren. FRENCH, per, de l'Air et l'Espace, No 1, 1963, *ACSI I-2393-A pp 17-21. ID 2229435 The Terraplane BC-4. The First French Glider, by J. P. *ACSI I-2393-B FRENCH, per, 1'Aviation, No 1, 1963, p 17. ID 2229435 Report on Civil Aircraft of the German Democratic Republic, 57 pp. GERMAN, rpt, Nachrichten fuer die Zivile Luftfahrt ACSI I-1682-A-Q der Deutschen Demokratischen Republik, 1959-1961. ID 2203216 A Contribution to the Mathematical Treatment of the Opening Deployment Shock in Parachutes, by W. Heins, R. Ludwig. GERMAN, per, Jahrbuch der Wissenschaftliche Gesellshaft fuer Luftfahrt, 1959, pp 288-291. 9203668 AEC-SCL-T-450 Experience with the Physical Stresses of Regular Weather-Observation Flights at 5000 Meters and Their Reduction Through Use of a Pressurized Suit, by P. Klanke, 14 pp. GERMAN, per, Luftfahrtmedizinische Abhandlungen, Vol II, No 3-4, 1938, pp 182-189. 9668345 FTD-TT-62-1424 The Applicability of Aerodynamic Propulsion to Navigation, by O. Asboth, 10 pp. GERMAN, per, Schiff und Hafen, No 6, 1958, pp 492-497. 9202873 ACSIL Tr 1175 The Guiding of Aircraft Under Radar-Jamming Conditions, by Z. Guminski, 23 pp. POLISH, per, Naprowadzanie Samolotow W Warunkach Zaktocen Radiolokacyjnych, No 6, 1962, pp 20-30. 9680261 FTD-TT-62-1879 Photogrammetric Airplane, by B. Piatkowski. POLISII, per, Skrzydlata Polska, No 11 (610), 1963, pp 6-8. *FTD-TT-63-415

Scientific Aerospace (Contd)

Selected Articles From the Rumanian Periodical Stiinta si Tehnica.

No 1, 1962, pp 14-16. 9680347 Parachuting at Supersonic Speeds, by Constantin Sabin Ioan, 10 pp. FTD-TT-62-1307

Vol XIV, No 11, 1962. IL-62 -- The Winged Giant, by Ion Trofin, 7 pp, (pp 8, 9.) JPRS 18565

On the Way to the Planet Mars: "Mars-1", by F1. Zaganescu, 9 pp. (pp 14-16).

The Engine of Tomorrow. Rotating or Reciprocating Piston, by Louis Rubel, 7 pp, (pp 24, 25, 45).

Interference Between Wing and Body in High Order Conical Flow, by Elio Carafoli, Dan Mateescu. RUMANIAN, per, Studii si Cercetari do Mocanica Applicato, No 2, 1962, pp 275-294.

*FTD-TT-63-391

Principles of Construction of Rockets with Liquid Propollants, by P. Drakulic. SERBO-CROATIAN, por, Vojnotekhnicki Glasnik, No 3, 1962, pp 200-208.

*FTD-TT-63-346

Agriculture

Bringing Valuable Specimens of Vetchling into Selection, by L. Garanina. RUSSIAN, bk, Breeding and Seed-Growing, USSR, No 1, 1961, pp 52, 53.

CSIRO/No 5840

On the Application of the Concept of Series and Cycles in the Study of the Coniferous-Broadleaved Woods, by V. Porfiriev.

RUSSIAN, per, Byul' Mosk Obshch Ispytatelei Prirody, Vol LXV, No 3, 1960, pp 93-102.

CSIRO/No 5754

Some Features on the Ontogeny of Root - and Stemwood in Sweet Chestnut, by L. A. Lebedenko.
RUSSIAN, per, Byul' Mosk Obshch Ispytatelei Prirody
Otdel Biolog, Vol LXVI, No 4, 1961, pp 66-71.

NLL RTS 2138

Effect of Concentrated Salt Solutions on the Physiology of Swelling and Germination of Seeds of Some Ligneous and Scrub Plants, by S. Alekperov. RUSSIAN, per, Iz Ak Nauk Azerbaidzhan SSR, No 1, 1961, pp 15-23.

CSIRO/No 6069

Scientific Agriculture (Contd)

New Types of Vegetable Preserves, by A. N. Cheyshvili, 5 m. ACSI I-2337 RUSSIAN, per, Konservnaya i Ovoshchesushil Prom, 1963, ID 2229412 pp 16-18. 525th MI Bn Determining Fire Danger in the Forest, by A. V. Vasilenko. RUSSIAN, per, Lesnoye Khoz, No 3, 1961, pp 37, 38. NRC/Ref: C-3978 Determination and Practical Application of Fire Danger, by N. V. Kornil'yev. RUSSIAN, per, Lesnoye Khoz, No 4, 1961, pp 41-44. NRC/Ref: C-3970 Immunity of Pigmented Plants and Antibiotics, by A. Kapustinskiy. RUSSIAN, per, Progress in Contemporary Biology UCSR, Vol XXIX, No 3, 1950, pp 370-378. CSIRO/No 5988 The Protein Complex of the Wheat Grain and Its Modification as a Result of Remote Hybridization, by N. A. Tiunova. RUSSIAN, per, Trudy Glavnyi Botanicheskiy Sed Ak Nauk SSSR, Vol VIII, 1961, pp 113-140. **NLL RTS 2118** The Dovelopment of Research on Agricultural Subjects, 7 pp. RUSSIAN, per, Vest Ak Nauk SSSR, No 12, 1962, pp 92-95. JPRS 18349 Methods of Research into Flower Bud Formation and Dovelopment on Apple Trees, by T. M. Vasiltsova. RUSSIAN, per, Vest Sel'skokhoz Nauk, Vol IV, No 7, 1959, pp 56-66. **NLL RTS 2096** World Resources of Early Spring Wheat as an Initial Material for Selection, by M. M. Yakubtsiner, 39 pp. RUSSIAN, per, Vest Sel'skokhoz Nauk, Dec 1962, pp 7-17. JPRS 18528 The Influence of Foreign Pollen on Depressing Self-Pollination and Characteristics of Corn Hybrids, by Z. Lebedeva, 9 pp. RUSSIAN, per, Vest Sel'skolkhoz Nauk, Dec 1962, pp 19-24. JPRS 18528 Illustrated Manual of Forage Plants of China, 515 pp. CHINESE, bk, Chung-kuo Ssu-liao Chih-wu T'u-p'u, Peiping, 1959, 517 pp. JPRS 18494 Erosion in the Gully Drainage Systems in the Middle Yellow River Loess Region and Its Relation to Water and Soil Conservation, 194 pp. CHINESE, document, Huang-ho Chung-yu Huang-t'u Ch'u-yu Kou-tao Liu-yu Ch'in-shin Ti-mao Chi Ch'i Tui Shui-t'u Pao-ch'ih Kuan-hsi Lun-ts'ung, Peiping, 1958, pp 1-69. JPRS 17610

Scientific Agriculture (Contd)

Organic Acids in Forage Plants, by G. Fauconneau. FRENCH, per, Annales Agronomiques, Supplement 1, 1958, pp 1-13.

CSIRO/No 6060

Variations in the Nitrogen Content of Wheat Grain. Relationships with the Vitroesity of Soft Wheats and the Starchiness or "Yellow Berry" of Derum Wheats, by Y. Coic, J. M. Lefebvre. FRENCH, per, Comptes Rendus, Academie D'Agriculture de France, Vol XLVI, 1960, pp 369-373.

MU/T.413

Plant Physiology - on Growth Inhibition Caused by Peronospora Tabacina Adam Condium Extracts, by C. Izard.

FRENCH per Comptes Rendus des Scances de 11400

FRENCH, per, Comptes Rendus des Sceances de l'Academie des Sciences, Vol CCLIII, No 23, 1961, pp 2756-2758.

CSIRO/No 5987

Frictionated Determination of Organic Nitrogen Compounds in Soil by Oxidative Degradation, by D. Davidesco. GERMAN, per, Agrochimica, Vol VI, No 1, 1961, pp 1-11.

CSIRO/No 5974

Irrigation Problems in West Pakistan, by Hans Boesch, 11 pp. GERNAN, per, Geographica Helvetica, Vol XVII, No 3, 1962, pp 222-229. (Call No. Gl.G27)

Army Map Service

Mechanical Singling of Sugar Beets, by W. Brinkmann. GERMAN, per, Landtechnische Forschung', Vol XI, No 5, 1961, pp 130-138.

GB/141/112

Necessity of Mastering the Method to Develop Animal Husbandry, by Nguyen Van Loc, 11 pp. VIETNAMESE, per, Hoc Tap, No 1, 1963, pp 33-38.

PAGATORICAL MIN. INC. T. C.	
Some Aspects of Exchange of Matter in Modiola Phaseolina and Mytilus Golloprovincalls in and Under Conditions, by O. G. Karandeyeva. RUSSIAN, rpt, 1959, Attachment to NA Beirut 170-62.	Navy Tr 3309 ONI 910
Bionics, by Leonid Pavlovich Krayzmer, 111 pp. RUSSIAN, bk, Bionika, Moscow, 1962, pp 4-72.	JPRS 18372
Articles From Great Medical Dictionary, 13 pp. RUSSIAN, bk, Bolshaya Meditsinksaya Entsiklopediya, Vol XXVIII, 1962, pp 235-238, 452-456.	JPRS 18261
Local Reaction of Protoplasm and Gradual Excitation, by D. N. Nasonov. RUSSIAN, bk, Mestnaya Reaktsiya Protoplazmy i Rasprostranyayushcheesya Vozbuzhdenie, 1959.	OTS 61-31011 PL-480
Fundamentals of Practical Ballisto-Cardiography, by R. M. Bayevskiy. (SF-2594) RUSSIAN, bk, Osnovy Prakticheskoy Ballisto Kardiografii, Moscow, 1962, pp 3-175.	*JPRS
Parasites of Freshwater Fish and Biological Basis for Their Control, by O. N. Bauer. RUSSIAN, bk, Parazity Presnovodnykh Ryb i Biologicheskio Osnovy Bor'by s Nimi, Vol XLIX, 1959.	OTS 61-31056 PL-480
Practical Questions of Vector-Cardioscopy, by I. T. Akulinichev. (SF-2593) RUSSIAN, bk, Prakticheskiye Voprosy Vektor Kardioskoppii, Moscow, 1960, pp 3-214.	*JPRS
Problems of Space Biology, by N. M. Sisakyan, 659 pp. RUSSIAN, bk, Problemy Kosmicheskoy Biologii, Vol I, 1962, pp 1-462. 9668309	FTD-MT-62-78
Problems of Space Biology, by N. M. Sisakyan, V. I. Yazdovskiy, 434 pp. RUSSIAN, bk, Problemy Kosmicheskoy Biologii, Moscow, Vol II, 1962, pp 1-430.	JPRS 18395
Fauna of the USSR, by A. N. Svetovidov. RUSSIAN, bk, Ryby Gadiformes, Moscow, Vol IX, No 4, 1948.	OTS 63-11071 PL-480
Synthetic Atropine-Like Substances, by S. G. Kuznetsov, S. N. Golikov. (DC-8585) RUSSIAN, bk, Sinteticheskiye Atropinopodobnyye Ueshchestva, Moscow, 1962, pp 3-224.	*JPRS

Influence of Ionizing Radiation on the Functions of the Central Nervous System, by N. N. Livshits, 269 pp.
RUSSIAN, bk, Vliyaniye Ioniziruyushchikh Izlucheniy na Funktsii Tsentral noy Nervnoy Sistemy, 1961, pp 1-180. 9680266

FTD-TT-62-865

Effects of Ionizing Radiation on the Virus Infection and Antivirus Immunity, by O. P. Peterson, et al, 167 pp.
RUSSIAN, bk, Vliyaniye Ioniziruyushchego Izlucheniya na Virusnyo Infektsiy i Protivovirusnyi Immunitet, Moscow, 1961.

*AEC

Ecology of Shrews Genus Sorex of Western Siberia, by B. S. Yudin, 142 pp. RUSSIAN, bk, Voprosy Ekologii, Zeogeografii, Siatematiki Zhivotnykh Trudy Biologicheskogo Instituta, Ak Nauk SSSR, Sibirskoye Otdeleniye, Vol VIII, 1962, pp 33-134.

JPRS 17973

Problems of Radiobiology, by L. A. Kachur. RUSSIAN, bk, Voprosy Radiobiologii, Vol II, 1957.

OTS 61-31016 PL-480

Experimental Study and Clinical Use of Lysozyme, by Z. V. Yermol'yeva, N. M. Furer, 17 pp. RUSSIAN, per, Antibiotiki, Vol VIII, No 1, 1963, pp 39-45.

JPRS 18533

Cytochemistry of Blood Glycogen in Mammals After Single Whole-Body X-Irradiation, by A. L. Shabadash, Yu. B. Kheyfots, 19 pp. RUSSIAN, per, Arkhiv Anatomii, Gistologii i Embriologii, Vol XLIII, No 12, 1962, pp 29-35.

JPRS 18479

Theoretical Basis for the Principle of Single-Celled Algae Cultivation, by I. V. Smirnov, 16 pp. RUSSIAN, per, Biofizika, Vol VIII, No 1, 1963, pp 90-100.

JPRS 18432

Chemistry of Blue-Green Algae (Cyanophyceae), by G. K. Barashkov, 17 pp. RUSSIAN, per, <u>Botan Zhur, Ak Nauk SSSR</u>, Vol XLVI, No 3, 1961, pp 447-454. 9680513

FTD-TT-63-193

Selected Articles From the Russian Periodical Byul Moskov Obshch Ispytateley Prirody, Otdel Biologii.

Vol LXVI, No 3, 1961, pp 32-39. The Biological Sequela of the Level Variations in Lake Baikal, by M. M. Kozhov, N. V. Tyumentsev, 8 pp.

JPRS 18383

Vol LXVI, No 4, 1961, pp 119-133. The Nature of Heterosis and Mothods of Its Utilization in Plant Selection, by Z. S. Nikorov, 36 pp. JPRS 18333

Vol LXVI, No 6, 1961, pp 110-115. Periodicity of Humpback Whale Feeding in the South Atlantic Ocean, by M. V. Ivashin, 8 pp. JPRS 18408

Vol LXVII, No 5, 1962. On the Adaptations of Cetaceans to Rapid Swimming and the Possibility of Using These Adaptations in Shipbuilding, by A. G. Tomilin, 10 pp, (pp 10-18). JPRS 18206

The Effect of Various Biomasses of Water Plants on Trace Concentrations of Cosium and Strontium in Tanks with a Low Flow Rate, by A. L. Agre, A. P. Raiko, et al, 9 pp, (pp 120-127).

On Methods of Aging Toothed Whales, by S. E. Kleinenberg, G. A. Klevezal, 8 pp.
RUSSIAN, per, Dok Ak Nauk SSSR, Vol CXLV, No 2, 1962, pp 460-462.

Dept of Interior QH301 C273 No 407

Formation of New Aurantine Fractions and Study of Their Chemical and Biological Properties, by V. N. Shaposhnikov, M. V. Nefelova, 7 pp. RUSSIAN, per, Dok Ak Nauk SSSR, Vol CXLVII, No 6, 1962, pp 1476-1479.

JPRS 18493

Some Characteristics of the Regulation of Intracranial Circulation, by A. A. Kedrov, A. I. Naumenko, 14 pp. RUSSIAN, per, Fiz Zhur SSSR, Vol XXXVII, No 4, 1951, pp 431-438.

NASA TT F-161

Pressure Fluctuations in the Hermetric Cavity, by A. I. Naumenko, 14 pp. RUSSIAN, per, Fiz Zhur SSSR, Vol XLII, No 8, 1956, pp 660-667.

NASA TT F-162

Functional Changes in an Organism as a Result of Breathing a High Oxygen-Low Carbon Dioxide Gas Mixture for Many Hours at Rest and During Exercise, by S. A. Brandis, V. N. Pilovitskaya, 18 pp. RUSSIAN, per, Fiz Zhur SSSR, Vol XLVIII, No 4, 1962, pp 455-463. 9680007

FTD-TT-62-1176

Restitution of the Electroencephalogram After Hypothermia, by P. M. Stardov, Ye. K. Aganyants, 15 pp.
RUSSIAN, per, Fiz Zhur SSSR imeni I. M. Sechenova, Vol XLVIII, No 6, 1962, pp 629-637, 9680276

FTD-TT-62-1904

The Problem of Determining the Maximum Permissible Levels of Strontium-90 Content in Food Products, by P. P. Lyarskiy, A. A. Moisv, 12 pp. RUSSIAN, per, Gigiyena i Sanıtariya, Vol XXVIII, No 1, 1963, pp 83-89.

JPRS 18492

Changes in the Nasal Mucous Membrane Upon Adaptation to Cold in the North, by N. I. Bobrov, 6 pp. RUSSIAN, per, Gigiyena i Sanitariya, Vol XXVIII, No 1, 1963, pp 97-99.

JPRS 18492

Passage of Strontium-90 From Milk to Various Dairy Products During Various Tochnological Production Processes, by Z. V. Dubrovina, O. M. Belova, 5 pp. RUSSIAN, per, Gigiyena i Sanitariya, Vol XXVIII, No 1, 1963, pp 105-108.

JPRS 18492

Sclected Articles From the Russian Periodical Iz Ak Nauk SSSR, Ser Biol.

No 4, 1961, pp 620-629. Cerebral Pulsation in the Closed Cranial Cavity, by Yu. Ye. Moskalenko, 17 pp. NASA TT F-158

No 3, 1962. Scientific Achievements by Establishments of the Department of Biological Sciences (Academy of Sciences USSR) and Their Introduction Into Practice, by N. M. Sisyakan, 20 pp. (pp 317-333). JPRS 18091

Succession of Insects and Other Vertebrates in Spruce Wood and Their Role in Windfall and Felling Litter Decay, by E. F. Kozarzhevskaya, B. M. Mamayev, 8 pp, (pp 449-454).

Annual General Meeting of the Departments of Biological Sciences, Academy of Sciences USSR, by T. N. Shcherbinovskaya, 6 pp, (pp 473-476).

Selected Articles From the Russian Periodical Iz Ak Nauk SSSR, Sor Biol. (Contd)

12 AK NAUK SSSK, SOT BIOL. (Contd)	
No 6, 1962. Nucleic Acids and Evolution in a Group of Algae, by G. P. Serenkov, (pp 857-868).	*FTD-TT-63-421
Conference on Electron Microscopy, by A. N. Studitskiy, 11 pp, (pp 935-940).	JPRS 18280
At a Session of the General Assembly of the Biological Sciences Section Academy of Sciences USSR, by V. G. Kocherezhkin, 5 pp, (pp 948-950).	JPRS 18280
No 1, 1963. Extraterrestrial Life, by A. I. Oparin, 7 pp, (pp 3-8).	JPRS 18538
Problems in Cybernetics and Space Medicine, by V. V. Parin, R. M. Bayevskiy, 6 pp, (pp 9-14).	
Changes in the Mechanical Properties of Synthetic Vascular Prostheses, by N. B. Dobrova, A. D. Drogaytsev, 13 pp. RUSSIAN, per, Khirurgiya, No 2, 1963, pp 137-141.	JPRS 18644
Treatment of Terminal States in a Therapeutic Clinic, by V. A. Negovskiy, 31 pp. RUSSIAN, per, Klin Hedit, Vol XXXI, No 2, 1963, pp 3-13.	JPRS 18444
Influence of Gamma Rays on Some Albumen Fraction of Beef, by M. L. Frumkin, G. L. Pavlova, et al. RUSSIAN, per, Konservnaya i Ovoshchesushil Prom, No 1, 1963, pp 19-22.	*ACSI I-2380 ID 2229429 525th MI Bn
Television Microscopy in Biology and Medicine, by M. P. Zykov, L. G. Bakinova, 5 pp. RUSSIAN, per, <u>Laboratornoye Delo</u> , No 1, 1963, pp 3-5.	JPRS 18299
Medicine and the Cosmos, by V. Vasilevskiy, Yu. Fedotov, 11 pp. RUSSIAN, per, Molodoy Kommunist, No 12, 1962, pp 45-50.	JPRS 18627
The Physiological Basis of Consciousness in the Light of Most Recent Research on Brain Activity, by M. A. Logvin, 10 pp.	
RUSSIAN, per, Nauchnyye Doklady Vysshey Shkoly, Filosofskiye Nauki, No 5, 1962, pp 42-49.	JPRS 18208

The Interrelationship Between Two Aspects of Cognition, by B. M. Kedrov, 13 pp. RUSSIAN, per, Nauchnyye Doklady Vysshey Shkoly, Filosofskiye Nauki, No 5, 1962, pp 50-58. JPRS 18208 Soviet Studies of Space Embryology, by A. Neyfakh, RUSSIAN, per, Nauka i Zhizn', No 1, 1963, pp 65-67. JPRS 18589 Selected Articles From the Russian Periodical Okeanologiya. JPRS 18400 No 2, 1962. On the Problem of Heterotrophic Organism Distribution in the Indian Ocean and Antarctic Waters, by A. N. Bogoyavlenskiy, 10 pp, (pp 293-297). On the Question of the Productivity of the Aral Sea, by Ye. A. Yablonskaya, N. K. Lukonina, 14 pp, (pp 298-304). Oceanographic Work of the Pacific Marine Fisheries and Oceanography Institute's Soviet-Vietnam Scientific Explorative Expedition, by I. P. Bolgikh, 8 pp, (pp 368-371). JPRS 18301 No 6, 1962, pp 961-969. Underwater Fishery Research in the USSR, by V. P. Zaytsev, 12 pp. Deep-Sea Fishes, by O. N. Kiselev, 5 pp. JPRS 18433 RUSSIAN, por, Priroda, No 12, 1962, pp 96-98. Prospects for Developing the Riches of the Ocean, by S. V. Mikhaylov, 11 pp. JPRS 18475 RUSSIAN, per, Priroda, No 1, 1963, pp 35-43. The State of Newborn Rabbits in Allexan Induced Diabetes at Various Periods of Rabbit Pregnancy, by S. E. Drisgalovich-Egorova, 9 pp. RUSSIAN, per, Problemy Endokrin i Germonteropii, Navy Tr 3354 NMS 767 Vol VI, 1960, pp 20-23.

A Fulminating Form of Tertian Malaria, by E. M. Tareyev, A. A. Gontayeva, 7 pp. RUSSIAN, per, Sovet Medit, No 4, 1943, pp 12-14. 9205170

NIII 3-5-63

Oncological Care and Incidence of Tumors in Kirghizistan, by A. I. Sayenko, 7 pp. RUSSIAN, per, Sovetskoyo Zdravookhraneniye Kirgizii, No 6, 1962, pp 3-7.

Development of Eyes and Their Function in Embryos Larvae of Pike Perch, by E. A. Baburina, 20 pp. RUSSIAN, per, Trudy Inst Morfologii Zhivotnykh imeni A. N. Severtsova, Ak Nauk SSSR, No 33, 1961, pp 151-172. 9205255

NIH 3-11-63

A Method of Collection, Transportation and Post-Incubation of Pleurogrammus Azonus Roe, by Yu. I. Orlov, L. V. Polikashin, 12 pp. RUSSIAN, per, Trudy Instituta Okeanologii, Vol LIX, 1962, pp 183-190.

JPRS 18561

The Greenlings and Their Introduction Into the Northern Seas of the USSR, by T. S. Rass, 16 pp. RUSSIAN, per, Trudy Instituta Okeanologii, Vol LIX, 1962, pp 191-203.

JPRS 18561

Some Ecological Factors Determining Seasonal Changes in Distribution of the White Sea Harp Seal Population, by K. K. Chapskiy, 22 pp.
RUSSIAN, per, Trudy Soveshchaniy, Ikhtiolog Komissii Ak Nauk SSR, No 12, 1961, pp 150-163.

Dept of Interior QH 301 C273 No 380

The Origin of Glacial Relict Amphipods in Relation to the Question of the Postglacial Connection Between the White Sea and the Baltic, by N. B. Lomakina, 17 pp.

RUSŠIAN, per, Uchenye Zapiski Karelo-Finskovo Universiteta, Biolog Nauk, Vol IV, No 3, 1952, pp 110-127.

Dept of Interior QH301 C273 No 390

The Mechanism of Intracranial Circulation, by A. A. Kedrov, A. I. Naumenko, 25 pp. RUSSIAN, per, Uspekhi Sovremennoy Biologii, Vol XXXVIII, No 2, 1954, pp 183-198.

NASA TT F-159

The "Toxin-Enzyme" Hypothesis and the Role of Bacterial Enzymes in the Pathogenesis of Infections, by I. V. Domaradskiy, 24 pp.
RUSSIAN, per, Uspekhi Sovremennoy Biologii, Vol LIV, No 1, 1962, pp 57-70. 9680511

FTD-TT-63-162

International Scientific Life Program of Investigating Cardio-Vascular Diseases, by V. V. Parin, 8 pp. RUSSIAN, per, Vest Ak Med Nauk SSSR, No 3, 1961, pp 48-50. 9679891

FTD-TT-62-1611

International Scientific Life Achievements of Medicinal Electronics, by Ye. B. Babskiy, V. V. Parin, 16 pp. RUSSIAN, per, Vest Ak Med Nauk SSSR, No 5, 1961, pp 88-93. 9679894

FTD-TT-62-1612

Philosophical Problems of Cybernetics, by B. F. Semkov. RUSSIAN, per, Vest Ak Nauk SSSR, No 9, 1962, pp 128-132.

*FTD-TT-63-368

Some Results of the Development of Space Biology, by G. P. Mikhaylovskiy. RUSSIAN, per, Vest Ak Nauk SSSR, No 12, 1962, pp 105-108.

*FTD-TT-63-358

Biological Systematics in the Service of Science and Practice, by G. Ya. Bey-Biyenko, 9 pp. RUSSIAN, per, Vest Ak Nauk SSSR, No 1, 1963, pp 38-41.

JPRS 18324

Selected Articles From the Russian Periodical Voprosy Filosofii.

No 12, 1962, pp 57-62. Philosophical Questions of the Transformation of Naute, by G. F. Khil'mi, 14 pp.

JPRS 18046

No 1, 1963.
Results of the All-Union Conference on Philosophical Questions Concerning the Physiology of Higher Nervous Activity and Psychology, 5 pp, (pp 126-128).

JPRS 18606

The Construction of Communism and the Tasks of Social Sciences, by M. P. Gapochka, O. M. Karpenko, et al, 20 pp, (pp 128-138).

The Resolution of the Session of the General Moeting of the USSR Academy of Sciences Devoted to the Tasks of Developing Social Sciences During the Full-Scale Construction of Communism, 7 pp. (pp 139-142).

Effect of Various Food Organisms on Fish Growth and Composition of Fishery Complexes, by B. M. Mednikov, 32 pp. RUSSIAN, per, Voprosy Ikhtiologii, Vol II, No 2, 1962,

pp 299-308.

JPRS 18573

Olfaction in Fish, by B. A. Flerov, 17 pp. RUSSIAN, per, Voprosy Ikhtiologii, Vol II, No 3, (24), 1962, pp 517-529.

JPRS 18499

A Rapid Method for Determining the Strontium-90 Content of Milk, by M. M. Golutvina, T. A. Kazakova, 8 pp. RUSSIAN, per, Voprosy Pitaniya, Vol XXII, No 1, Jan-Feb 1963, pp 66-69.

pp 107-112.

A Mathematical Analysis of Rectilinear Forms Perceived Visually, by V. S. Ivanov, 13 pp. RUSSIAN, per, <u>Voprosy Psikhologii</u>, No 5, 1962, pp 75-83. JPRS 18719

On the Subject of Social Psychology, by B. D. Parygin, 13 pp.
RUSSIAN, per, Voprosy Psikhologii, No 5, 1962,

JPRS 18719

Prevalence of Rheumatic Fever Among School Children in UFA, by Ye. N. Tret'yakova, 5 pp. RUSSIAN, per, Voprosy Revmatizma, Vol III, No 1, Jan-Mar 1963, pp 66-70.

JPRS 18607

Cell Multiplication and the Growth of Hydroid Polyps, by L. V. Belousov, 13 pp.
RUSSIAN, por, Zhur Obshch Biol, No 4, 1961, pp 281-291.

JPRS 18293

Selected Articles From the Russian Periodical Zhur Vysshoy Nervnoy Deyatel nosti imeni I. P. Pavlova.

Vol XII, No 2, 1962, pp 223-228. 9680272 Perfection of Interoceptive Analysis During Acute Hypoxemia and Hypercapnia in Man, by A. B. Gandel'sman, N. B. Prokopovich, 11 pp.

FTD-TT-62-1903

Vol XII, No 6, 1962. Natural Scientivic and Philosophical Problems of the Present State of Science of the Brain, by F. A. Sarkisov, 19 pp, (pp 985-1000). JPRS 18315

Fourth Gagry Conference, by 0. S. Adrianov, M. Ya. Rabinovich, 7 pp, (pp 1085-1088).

Philosophical Problems in Physiology of Higher Nervous Activity and Psychology, by O. A. Krylov, V. I. Chumak, 15 pp, (pp 1089-1096).

Selected Articles From the Russian Periodical Zool Zhur.

Vol XL, No 12, 1961, pp 1868-1873. Characteristics of the Distribution of Yellow and Small Ground Squirrels in the Area of Their Joint Habitation, by Yu. A. Dubrovskiy. NLL RTS 2112

Vol XLI, No 10, 1962, pp 1516-1528. Significance of Certain Fish Sounds, by V. R. Protasov, Ye. V. Romanenko, 13 pp.

Selected Articles From the Russian Periodical Zool Zhur. (Contd)

Vol XLII, No 1, 1963. Biological Fishery Management Science at a New Stage, by L. S. Berdichevskiy, 20 pp, (pp 3-10).

JPRS 18548

New Settlers Among the Flora and Fauna of the Northern Sea and the Baltic, 17 pp, (pp 20-27).

Estuarine Fauna Colonization of Nikolayev and Yuzhniy Resorvoirs of the Ukraine by Means of Canals, by P. A. Zhuravel, 10 pp, (pp 28-31).

The Present State of Theriology in the USSR and Abroad, by G. A. Novikov, 32 pp. (pp 78-91).

On the Accumulation and Excretion of the Radioactive Isotopes of Seven Chemical Elements in Dragonfly Larvae, by G. A. Volkova, 6 pp, (pp 138, 139).

The Strugglo Against Parasitic Diseases in 1962, 6 pp. BULGARIAN, per, Veterinarna Sbirka, Vol LX, No 1, 1963, pp 1, 2.

JPRS 18222

Development of Limnology and Hydrochemistry in China, by I. V. Samoilov, 45 pp. CHINESE, bk, <u>Hai-yang Yu Hu-chao</u>, May 1958, pp 153-165.

JPRS 18323

The Use of Aerosol Thorapy in Some Acute Inhalation Poisonings, by K. Kadlek, J. Vyskocil. CZECH, per, Procovoni Lekarstvi, Vol V, 1953, pp 268-270. NLL M 8933

Canned Vogetable Technical and Scientific Research
Center, 5 pp.
FRENCH, rpt, Institut pour l'Encouragement de la
Recherche Scientifique dans l'Industrie et l'Agriculture
(I.R.S.I.A.) - Rapport Annual, Exercise 1961, pp 106-113.

LD 2224772

Blue Sclerae, Fragility of Bones and Deafness, by J. van der Boeve, A. de Kkeyn, 13 pp. GERMAN, per, Archiv fuer Ophthalmologie, Vol XCV, 1918, pp 81-93.

Radiation Protection During Handling of Exposed Radioactive Materials, by H. Gotte.
GERMAN, per, Atompraxie, Vol VI, No 3-5, 1960, pp 1-15.
9203637

AEC-Tr-5573

Navy Tr 3351

NMS 764

The Relationships of the Length-Width Index of Cells and Organs in Gigas Plants and Their Original Small-Celled Forms, by Walther Rudiger.

GERMAN, per, Berichte der Deutschen Botanischen
Gesellschaft, Vol LXV, 1952, pp 239-245. 9204987

AEC-Tr-5571

The Regional Distribution of Hydrocarbon Oxidizing Bacteria in Various Soils, by Herbert Volz, Wilhelm Schwartz, 13 pp.

GERMAN, per, Erdol und Kohle, No 6, 1962, pp 426-429.

JPRS 18100

Veneroal Diseases in the Navy, by Armin Wandel, 10 pp. GERMAN, per, Die Medizinische Welt, No 29, 1962, pp 1552-1555.

Navy Tr 3353 NMS 766

Transfer of Genetic Information, by H. G. Wittmann. GERMAN, per, Naturwissenschaften, Vol L, 1963, pp 76-88.

*AEC

Early Effects of Ioinizing Radiation (Co⁶⁰) on the Human Brain, by Dennes Afra, Wilhelm Mueller, et al. GERMAN, per, Strahlentherapie, Vol CXVI, 1961, pp 231-241. 9204993

AEC-UCRL-Tr-889

Research on Pure Cultures of Hydrocarbon Oxidizing Bacteria, by Herbert Volz, 8 pp.
GERMAN, per, Z fuer Allgemeine Mikrobiologie, Vol II, No 2, 1962, pp 157-163.

JPRS 18100

On the Osteogenosis Imperfecta Congenita of the Labyrinth Capsule, by Max Meyer, 13 pp. GERMAN, por, 2 fuer Hals-Nasen und Ohrenheilk, Vol XXVI, 1930, pp 297-304.

Navy Tr 3357 NMS 770

Histopathology in Otosclerosis. Changes in the Bones, by Moritz Weher, 36 pp. GERMAN, per, Z fuer Hals-Nasen und Ohrenheilk, Vol VIII, 1961, pp 44-75.

Navy Tr 3364 NNS 775

Second Contribution to Systematic Classification and Morphology of the Pentastomida, by R. Heymons. GERMAN, per, Zoologisch Anzeiger, Vol LV, 1922, pp 154-167.

*NMS 776

A New Stage in the Development of the Hungarian Animal Health Administration, by Laszlo Varnagy, 5 pp.
HUNGARIAN, per, Magyar Allatorvosok Lapja, Vol XVII, No 3, 1963, pp 81-83.

JPRS 18440

On Blood Volume Near Pulminary Circulation in Normal Condition, by R. Bianchi, C. Giusti, et al. ITALIAN, per, Bollettino Societa Medico Chirurgica di Pisa, Vol XXIX, No 6, 1961, pp 1-4.

*AEC

The Distribution and Excretion of Radioactive Ruthenium (106Ru) in Mice, by Eiko Sairenji. JAPANESE, per, Radioisotopes, Vol IX, No 3, 1960, pp 275-288. 9205005

AEC-NP-Tr-931

On the Stock of Hood Seals in the Northern Atlantic, by Birger Rasmussen, 28 pp. NORWEGIAN, por, Fisken og Havet. Populære Rapporter og Meldinger fra Fiskeridirektoratets Havforskningsinstitutt, Bergen, No 1, 1960.

Dept of Interior QH301 C273 No 387

Atmospheric Pollution, by Jan Juda, Karol Budzinski, 261 pp.
POLISH, bk, Zanioczyszczenia Atmosfery, Warsaw, 1961, pp 1-256.

JPRS 18455

Study of Viruses at the Inframicrobiology Institute in Bucharost, by Mihai Mazanet, 6 pp.
RUMANIAN, per, Contemporanul, No 51 (845), 21 Dec 1962, p 7.

JPRS 18504

Properties of Fresh Fish and Its Use in Army Nutrition, by I. Crkvenjakov, M. Milovic. SERBIAN, per, <u>Vojnookonomski Pregled</u>, No 5, 1962, pp 362-373.

*ACSI I-2187-A ID 2227653

Loss of Vitamins During Food Preparation. SERBIAN, per, Vojnoekonomski Pregled, No 5, 1962, pp 374-376.

*ACSI I-2187-B ID 2227653

The Academy of Sciences Ukrainian SSR and Its Role in the Formation of the Leading Medical Schools, by O. F. Makarchenko, K. F. Duplenko, 12 pp. UKRAINIAN, per, Fiziol Zhur Ak Nauk Ukrayins'koyi RSR, Vol VIII, No 6, Nov-Dec 1962, pp 701-708.

JPRS 18339

Age Peculiarities of Radioactive Phosphorus Assimilation by Skeletal Muscles in Various Degrees of Fatigue, by O. V. Epshteyn, 5 pp.
UKRAINIAN, per, Fiziol Zhur Ak Nauk Ukrayins'koyi RSR, Vol VIII, No 6, Nov-Dec 1962, pp 815-817.

Scientific Chemistry

والهراء المرأاء المهاكات

Interaction of Gaseous ZrCl₄, HiCl₄, NbCl₅, and TaCl₅ With KCl Using Radioactive Indicators, by I. Zvara, L. K. Tarasov. RUSSIAN, rpt. 9203647

AEC-Tr-5594

Synergetic and Antagonistic Effects in Plutonium Extraction Systems, by M. Taube. RUSSIAN, rpt, 1961.

AEC-Tr-5399

On the Reasons for Anomalous Loss of Electrons Out of the Ogra Plasma, by Yu. A. Kucheryayev, D. A. Panov. RUSSIAN, rpt, 1962, 21 pp.

AEC-Tr-5474

Investigation of Isotope Effects in Hydrogen Exchange Reactions in Liquid Hydrogen Bromide and Liquid Ammonia, by I. F. Tupitsyn, N. K. Semenova, et al. RUSSIAN, rpt, Conference on Radioisotopes in the Physical Sciences and Industry, Copenhagen, Sept 6-17, Vol III, 1960, pp 256-267 (1962). 9203404

AEC-Tr-5503

Reduction of Promethium at a Mercury Cathode, by A. K. Lavrukhina, G. M. Kolesov, et al. RUSSIAN, rpt, Conference on Radioisotopes in the Physical Sciences and Industry, Copenhagen, Vol III, Sept 6-17, 1960, pp 369-78 (1962). 9203402

AEC-Tr-5504

The Physico-Chemical Properties of Glass Fiber, by A. F. Zak. (NY-7561)
RUSSIAN, bk. Fiziko-Khimicheskiye Svoystva
Steklyannogo Volokna, Moscow, 1962, pp 1-224.

*JPRS

Ferrites - Structure and Certain Physical Properties, by A. S. Pakhomov, N. A. Smol'kov. RUSSIAN, monograph, Itogi Nauki, Antiferromagnetizm i Ferrity, No 4, 1962, pp 119-213.

*ACSI I-2409 ID 2229444

The Synthesis and Investigation of Anti-Oxidants for Power-Producing and Other Types of Oils, by A. M. Kuliyev, G. A. Zeynolova, et al, 10 pp.
RUSSIAN, bk, Prisadki k Maslam i Toplivam, Moscow, 1961, pp 102-109. 9668197

FTD-TT-G2-1453

Electrochemical Refining of Zinc From Amalgams, by B. M. Lapshin, I. N. Karpikhina. RUSSIAN, bk, Trudy Chistye Metaly i Poluprovodniki 1-01 (pervoi) Moshvuz Konv, Moscow, 1957, pp 277-282.

NLL RTS 2141

Chemistry of Diatomic Algae Diatomeae, by G. K. Barashkov, 15 pp.
RUSSIAN, per, Botan Zhur, Ak Nauk SSSR,
Vol XLV, No 9, 1960, pp 1350-1356. 9680512

FTD-TT-63-192

The Catalytic Properties of Chelate Polymers, by G. K. Boreskov, N. P. Keyer, et al, 9 pp. RUSSIAN, per, Dok Ak Nauk SSSR, Vol CXLIV, No 5, 1962, pp 1069-1072. 9668332

FTD-TT-62-1795

Study of the Sintering of Oxides by the Electoral Conductivity Method, by S. F. Pal'guyev, L. D. Yushina, 8 pp. RUSSIAN, per, Elektrokhimiya Rasplavlennykh Solevykh i Tverdykh Elektrolitov, No 2, 1961, pp 193-197.

JPRS 18350

Properties of Blended Barium and Strontium Ferrites, by Ye. S. Borovik, N. G. Usikova, 9 pp.
RUSSIAN, per, Fiz Met i Met, Vol XIII, No 3, 1962, pp 470-474. 9679881

FTD-TT-62-1539

The Role of Bacteria in the Conversion of the Carbon Portion and of the Asphalt Resin Components of Paraffin-Base Petroleum Under Anaerobic Conditions, by T. L. Simakova, N. V. Strigaleva, et al, 38 pp. RUSSIAN, per, Geokhim Sbornik, No 7, 1961, pp 77-97. 9680268

FTD-TT-62-1449

Behavior of the Mothyl Peroxide Radical in the Low-Temperature Oxidation of Methane, by A. A. Mantashyan, R. I. Moshkina, et al. RUSSIAN, per, Iz Ak Nauk Armyanskoy, SSR, Khim Nauk, Vol XIV, No 3, 1961, pp 185-195.

* AEC

The Effect of Composition, Heat and Electrolytic Treatment on the Dielectric Properties of Steatite Ceramics, by K. A. Vodop'yanov, B. G. Karov, 11 pp.
RUSSIAN, per, Iz Vysshikh Ucheb Zaved, Fiz, No 3, 1962, pp 55-61. 9680140

FTD-TT-62-1800

Entropy of Variation During Solution of Salts, by V. P. Vacilev. RUSSIAN, per, Iz Vysshikh Ucheb Zaved Khim i Khim Tekh, No 2, 1959, pp 522-527.

*AEC

A Thermochemical Gas Analyzer for Continuous Detection of Oxygen, by G. P. Tsyplyatnikov, V. B. Aleskovskiy, 16 pp. RUSSIAN, por, Iz Vysshikh Ucheb Zaved Khim i Khim Tekh, Vol III, 1960, pp 550-559. 9679886

FTD-TT-62-1554

Thermal Decomposition and Burning of Ammonium Perchloride, by A. A. Shidlovskiy, L. F. Shmagin, 7 pp.
RUSSIAN, per, Iz Vysshikh Ucheb Zaved Khim i
Khim Tekh, Vol V, No 4, 1962, pp 529-532. 9680274

FTD-TT-62-1902

Determination of Extent of Fire and Explosion Hazard of Chemical Industries and Standards of Design of Explosion Hazardous Plants, by V. S. Nikolayev.
RUSSIAN, per, Khim Prom, 1957, pp 302-306.

*AEC-UCRL-Tr-

933(L)

The Explosion Dangers in Dinitro Compounds of the Benzene Series, by I. F. Blinov. RUSSIAN, per, <u>Khim Prom</u>, 1959, pp 419-425. 9203654

AEC-Tr-5528

Hydropurification of a Refined Diesel Oil, by R. Sh. Kuliyev, B. A. Sadykhova, 5 pp. RUSSIAN, per, Khim i Tekh Topliv i Masel, No 5, 1962, pp 32-34. 9668254

FTD-TT-62-1735

Detecting Elemental Sulfur in Reactive Fuels, by A. G. Ryasnyanskaya, 6 pp. RUSSIAN, per, Khimiya Seraorgan Soyedineniy, Soderzhashchikhsya v Noft i Neft, Vol IV, 1961, pp 71-74. 9680278

FTD-TT-62-1451

Adhesion of Quartz Threads in Aqueous Media, by A. D. Malkina, B. V. Deryagin.
RUSSIAN, per, Kolloid Zhur, Vol XII, No 6,
1950, pp 431-447.

NLL M 5049

Rapid Method for Determining the Iodine Numbers of Fatty Alcohols and Fatty Acids, by V. I. Babayev, N. M. Dan'shina.
RUSSIAN, per, Masloboyno-Zhirovaya Prom, Vol XXVII, No 10, 1961, pp 30, 31.

NLL RTS 2137

Separation of Molybdenum and Iron by Ion-Exchange Chromatography, by I. P. Alimarin, A. M. Med.
RUSSIAN, per, Trudy Komissiu po Amaliticheskoi Khimii Inst Geokhim i Anal Khim, Vol VI, 1955, pp 351-364.

*AEC

The Determination of Alkali Metals, by M. L. Yashchenko, G. V. Ovchinnikov, et al. RUSSIAN, per, Trudy Pyatoi Sessi po Opredelen Absolyut Vozrasta Geol Formatsiy, 1956, Moscow, 1958, pp 296-307.

*AEC

Certain New Problems of Radiochemistry, by V. I. Spitsyn, 7 pp.
RUSSIAN, per, Vest Ak Nauk SSSR, No 1, 1963, pp 11-15.

JPRS 18488

Basic Tasks of Modern Chemical Technology, by N. M. Zhavoronkov, 7 pp. RUSSIAN, per, Vest Ak Nauk SSSR, No 1, 1963, pp 32-37.

JPRS 18488

Chromotographic Separation of Mixtures of Alkali Metals Ion-Exchange, by N. K. Galkina, M. M. Senyavin. RUSSIAN, per, Vses Soveshchaniye po Redkim Shchelochnym Elementam, 1958, pp 87-96. 9203661

AEC-UCRL-Tr-895(L)

Aromatic Polyriazines, by A. A. Berlin, B. I. Liogon'kiy, et al. RUSSIAN, per, Vysckomolek Soyed, Vol III, No 10, 1961, pp 1491-1494. 9204995

AEC-SCL-Tr-454

A Study of Conformational Changes in Macromolecules in Solutions. III. Conformational Changes in 2-Vinylpyridine-Methacrylic Acid Copolymer, by I. T. Slyusarov, S. S. Urazovskiy, 9 pp.
RUSSIAN, per, Vysokomolek Soyed, No 4, 1962, pp 481-485. 9680151

FTD-TT-62-1572

Separation of Molybdenum From Iron, Aluminum, and Calcium by Means of Ion-Exchange Anionites, by Yu. V. Morachevskiy, M. N. Gordeyeva. RUSSIAN, per, Zavod Lab, Vol XXIII, 1957, pp 1066, 1067. 9203398

AEC-UCRL-Tr-896(L)

The Effect of the Interaction of Ions on Their Equilibrium Concentration in Multiple Thermally Ionized Gases, by B. L. Timen.
RUSSIAN, per, Zhur Eksp Teor Fiz, Vol XXVII,
1954, pp 708-711. 9203659

AEC-UCRL-Tr-674(L)

The Vibrational Spectra of Ethylenimine and Its Alkyl Substitutes, by Yu. N. Scheinker, et al. RUSSIAN, per, Zhur Fiz Khim, Vol XXIX, No 3, 1955, pp 518-522.

Army Materiel Command FLRS Tr Log No 108

The Isotopic Effect in the Electrosynthesis of Ozone by Rayleigh's Method, by I. A. Tikhomirov, V. N. Melenevskiy, 5 pp. RUSSIAN, per, Zhur Fiz Khim, Vol XXXVI, No 4, 1962, pp 895-897. 9679883

FTD-TT-62-1535

Distribution of Lithium Isotopes in Immiscible Solvents, by V. M. Kolotyrkin, N. I. Nikolayev, 2 pp.
RUSSIAN, per, Zhur Fiz Khim, Vol XXXVI, No 11, 1962, pp 2540, 2541.

Navy Tr 3369/ ONI 942

Synthesis of Vitamin B₁, by A. I. Gravin. RUSSIAN, per, <u>Zhur Priklad Khim</u>, Vol XVI, No 3, 4, 1943, pp 105-117.

*AERE/Harwell

Synthesis of 2, 4, 6-Trialkyl and 2, 4, 6-Triaryl-1, 3, 5-Triazines From Imino
Esters, by A. Y. Yakubovich, E. L. Zaitsev, ct al.
RUSSIAN, per, Zhur Vses Khim Obshch imeni
D. I. Mendeleyeva, Vol VII, 1962, pp 229, 230.

AEC-SCL-T-442

Process for Determining the Content of Fluorine and Admixtures HF, CO₂, O₂ and Inert Residue in Technical Fluorine, by V. B. Aleskovskiy, G. P. Tsyplyatnikov, 4 pp. RUSSIAN, Patent No 123,752.

Patent Office

Effect of Chemical Composition on the Properties of Piezoelectric Ceramic Materials, by A. Koller, 5 pp.
CZECII, per, Ceskoslovensky Casopis Pro Fysiku, No 2, 1962, pp 136-138. 9680516

FTD-TT-62-1668

Ion Exchangers. A Survey of Their Characteristic Properties, by Milan Marhol. CZECH, per, Chemicke Listy, Vol LVI, 1962, pp 728-762.

*AEC

We are Condensing Helium, by Jan Prusak, 7 pp. CZECH, per, Veda Tech Mladezi, No 11, 1962, pp 368, 369. 9668316

FTD-TT-62-1669

Some Equilibriums of Hydrogen and of Deuterium With Cerium and Gadolinium, by Rodolphe Viallard. FRENCH, per, Annales de Chimie, Vol XX, Jan-Feb 1945, pp 5-72.

*AEC

Selected Articles From the French Periodical Comptes Rendus Academie des Sciences.

Vol CCLII, 1961.
Theory of the Anomalies of Electrical
Resistivity of the Rare Earths. Part I,
by Joseph Seiden, (pp 1922-1924).

The Interaction Between Magnetic Ions and Conduction Electrons in the Rare Earths. Part II, by Joseph Seiden, (pp 3550-3552).

Vol CCLIII, 1961, pp 812-814. Theory of the Electrical Resistivity of Gd. Part III, by Joseph Seiden.

Vol CCLV, No 4, 1962, pp 698-700. The Volatility of Plutonium Carbide and Plutonium Nitride, by F. Anselin, R. Pascard.

Vol CCLV, No 5, 30 Aug 1962, pp 901, 902. Determination of Molecular Structure of Some Polyphenyl Molecules by Rayleigh Diffusion, by Pierre Bothorel, Ander Unanue.

Study of Influence of Various Factors on the Corrosion of Zincaloy by Water or Steam at High Temperature and on Hydrogen Absorption by Metal, by H. Coriou, et al.
FRENCH, per, Energie Nucleaire, Vol IV, No 2, Mar-Apr 1962, pp 109-119. 9205012

Chromatographic Analysis of Oxygen and Argon at Low Concentrations in Coolant Gases, by R. Aubeau, et al. FRENCH, per, <u>Journal of Nuclear Materials</u>, Vol VI, Aug 1962, pp <u>271-280</u>.

Study of the Condensation of Sodium Molybdate Under the Action of Nitric Acid by the Conductometric Method, by Raluca Ripan, A. Duca. FRENCH, per, Revue de Chimie, Vol II, 1954, pp 73-95. 9203660

Reprocessing of Irradiated Fuels. GERMAN, rpt, Quarterly Report No 9, 1 Apr-30 Jun 1962.

AEC-Tr-5312

AEC-Tr-5312

*AERE Harwell

*AEC

AEC-NP-Tr-945

*UKAEA Windscale Tr No 33

AEC-UCRL-Tr-894(L)

*AEC

Vapor Pressure of Metallic Yttrium, by An. N. Nesmeyanov, Yu. A. Priselkov, et al. GERMAN, rpt, Paper No SM-26/56 presented at the Symposium on Thermodynamics of Nuclear Materials, Vienna, May 21-25, 1962. 9203645

AEC-Tr-5359

The Crystal Structure of Lithium Phosphate Li₃PO₄, by J. Zemann, 5 pp. GERMAN, per, Acta Crystallographica, Vol XIII, No 11, 1960, pp 863-867.

Natl Bur of Standards

Definitions for Explosive and Similar Materials, by H. Koenen, H. Freytag. GERMAN, per, Arbeitsschutz, No 9, 1959, pp 204, 205.

TIL T5193

Concorning the Causes of Liquofaction of Kaolin, by W. Czerch, K. Fruhauf, et al, 30 pp. GERMAN, per, Berichte Deutsche Keramische Gesellschaft, Vol XXXVII, No 6, 1960, pp 255-276.

Natl Bur of Standards

Contribution to the Property Characteristics of Cation Exchangers of Appropriate Inorganic Materials, by Hans-Jurgen Riedel.
GERMAN, per, Berichte der Kernforschungsanlage Julich, No 32, 1962, p 1, 9205016

AEC-Tr-5611

Biochemical Coalification of Eximite in Micrography, by E. Stach. GERMAN, per, grennstoff-Chemie, Vol XLIII, No 3, 1962, pp 71-78.

CRL/T 1100

Thermochemical Interpretation of Explosive Properties. II. Thermochemical Interpretation of the Explosive Properties of Commonly Used Explosives, by B. Glowiak.

GERMAN, per, Chemia Strosowana, Vol VI, 1962, pp 133-146.

AEC-Tr-5562

A New Apparatus for the Determination of Sulphur by the Combustion Method, Based on Surface Absorption, by M. J. Thomann, M. Auerbach. GERMAN, per, Giessercitechnik, Vol VII, 1961, pp 337-342.

BISI 3136

A New Method of Determining Oxygen Isotopes in Organic Compounds, by H. Dahn, H. Moll, et al, 20 pp.
GERMAN, per, Helvetica Chimica Acta, Vol XLII, 1959, pp 1125-1236.

ACSI I-8139 ID 2216558

The Evaluation of the Alkalimetric Titration of Phosphating Solutions and Phosphating Baths, by V. Cupr, J. B. Pelikan.
GERMAN, per, Metalloberflache, Vol XVI, 1962, pp 181, 182.

BISI 2988

The Question of Bonding in the Rare Barth Hydrides, by K. Dialer. GERMAN, per, Monatshefte fuer Chemie, Vol LXXIX, 1948, pp 311-315.

*AEC

Germanates With Bivalent Metal Ions, by G. Eulenberger, A. Wittmann, ot al, 10 pp. GERMAN, per, Monatshefte fuer Chemie, Vol XCIII, No 5, 1962, pp 1046-1054.

Nat1 Bur of Standards

On the Problem of Chemistry of Mendelevium, by M. Taube.
GERMAN, per, Nukleonika, Vol VII, 1962, pp 389-406.

*AEC

Dilatanch - a Property of Lean Coramic Masses, by Th. Plaul, 6 pp. GERMAN, per, <u>Silikattechnik</u>, Vol XIII, No 4, 1962, pp 139, 140.

Natl Bur of Standards

Photometric Determination of Antimony With Methylfluorone, by S. Meyer, O. G. Koch, 7 pp.
GERMAN, per, Z Analytische Chemie, Vol CLXXIX, 1961, pp. 175-186. 9202882

ACSIL-Tr-1462

Crystalline Tungsten Compounds, Hydrogen Analogs of the Tungsten Bronzes Hx WO3, by Oskar Glemser, Christa Naumann.
GERMAN, per, Z fuer Anorganische und Allgemeine Chemie, No 265, 1951, pp 288-302.

AEC-Tr-5122

Permeation of Hydrogen Through Pd-Coated Quartz Glass, by H. Bornert, U. von Weber.
GERMAN, per, Z fuer Anorganische und Alligemeine Chemie, Vol CCC, 1959, pp 81-83. 9204990

AEC-SCI,-Tr-457

Concerning the Existence of a Technetium Carbide, by W. Trzebiatowski, J. Rudzinski. GERMAN, per, Z fuer Chemie, No 2, 1962, p 158.

AEC-Tr-5470

4.4...

On the Electrochemistry of Fine-Pore Capillary Systems III. Electrical Conductivity, by Gerhard Schmid, Hans Schwarz. GERMAN, por, Z fuer Elektrochem, Vol LV, No 4, May 1951, pp 295-307.

*AEC

The Representation of Fiber Textures in Reciprocal Pole Figures, by Hans-Joachin Bunge. GERMAN, per, Z Metallkunde, No 51, 1960, pp 535, 536. 9204988

AEC-Tr-5603

Polymorphism of Arsenic, by K. Plieth, I. N. Stranski, 22 pp. GERMAN, per, Z fuor Physik, Vol CLVI, No 3, 1959, pp 360-381. 9202879

ACSIL Tr 1281

Selected Articles From the German Periodical Z fuer Physikalische Chemie.

Vol IXB, 1930, pp 437-475. 9203650 Investigations of Carbides I. The Crystal Structure of the MeC₂ Carbides, by M. V. Stackelberg.

Vol XIV, 1958, pp 32-48. The Kinetics of the Thermal Decomposition of Chlorine-Reptoxide in the Gaseous Phase, by R. V. Figini, E. Coloccis.

TIL T 5314

AEC-Tr-5486

Vol XX, No 5, 6, 1959, pp 332-352. Electronic Reversibility of the Chemisorption of H on Evaporated Ni Films, by R. Suhrmann, Y. Mizushima, et al. *AEC

Vol CCXIX, No 1, 2, 12 May 1961, pp 134-139. 9205007
The Determination of the Transference Numbers for Fused Thallium (I)-Nitrate, by I. G. Murgulescu, D. Topor.

AEC-Tr-5570

Amphoteric Character of Ethylenediamine-Tetraacetic Acid and Its Effect on the Stability of Metal Complexts, by M. Beck, S. Goeroeg.

HUNGARIAN, per, Magyar Tudomanyos Akad Kemiai Tudomanyok Osztalyanak Kozlemenyci, No 12, 1959, pp 265-277.

AWRE-Tr-37

French Achievements in the Field of the Treatment of Uranium Minerals, by J. E. Leger. ITALIAN, per, Energie Nucleaire, No 4, 1962, pp 16-23. 9203643

AEC-Tr-5546

A New Method for the Preparation of Colloidal Chromic Phosphate. Study of the Mechanism of Formation and Biological Behaviour, by B. Bellion, G. Buchi, et al. ITALIAN, per, Minerva Nucleare, Vol VI, No 7, 8, 1962, pp 199-208.

*AERE Harwell

Some Properties of Glassy Carbon, by Yamada Shigehiko. JAPANESE, per, Chemical Society of Japan, Industrial Chemistry Section, Vol LXV, No 7, 1962, pp 1139, 1140.

*AEC

Experiments on Helical Instability in the Positive Column in a Magnetic Field, by S. Shimamoto, S. Imazu, et al. JAPANESE, per, Kakuyugo Kenkyu, Vol IX, No 5, 1962, pp 463-472.

*AERE Harwell

Stability of the Positive Column in a Strong Magnetic Field, by M. Matsumoto. JAPANESE, per, <u>Kakuyugo Kenkyu</u>, Vol IX, No 5, 1952, pp 543-554.

*AERE Harwell

Determination of Arsenic and Antimony in Meteorites by Neutron Activation, by II. Hamaguchi, T. Nakai, et al.

JAPANESE, per, Nihon Kagaku Zasshi, Vol LXXXII, No 11, 1961, pp 1485-1489.

*AERE Harwell

Method of Preparing Various Esters of Alkyl Mercurithiosalicylic Acids, by S. Sakai. JAPANESE, Patent No 324,117, 1957.

*AEC

Method of Refining Alkyl Esters of Alklmercurithiosalicylic Acids, by S. Sakai. JAPANESE, Patent No 337,627, 1958.

*AEC

Use of a Plasma Generator for Spectroscopic Analysis of Titanium-Based Alloys, by E. E. Vainshtein, V. V. Korolev, et al. POLISH, per, Chemia Analityczna, Vol VII, No 1, 1962, pp 187-194.

*AEC

Selected Articles From the Polish Periodical Koks-Smola-Gaz.

OTS 60-21244 PL-480

Vol I, No 4, 1956, pp 143-152. 9203231 Principles of Classification of Organic Compounds in the Regular System of Hydrocarbons, by J. Jurkiewicz.

Vol II, No 1, 1957, pp 22-28. 9203231 Nitrogen Compounds, by J. Jurkiewicz, S. Rosinski.

Vol II, No 2, 1957, pp 62-65. 9203231 Sulfur Compounds, by J. Jurkiewicz, S. Rosinski.

Vol II, No 3, 1957, pp 98-107. 9203231 Oxygen Compounds, by J. Jurkiewicz, S. Rosinski.

Vol II, No 4, 1957, pp 144-149. 9203231 Oxygen Compounds, by J. Jurkiewicz, S. Rosinski.

Vol II, No 5, 1957, pp 180-188. 9203231 Aromatic Hydrocarbons, by J. Jurkiewicz, S. Rosinski.

Vol III, No 1, 1958, pp 20-25. 9203231 Allphatic Hydrocarbons, by J. Jurkiewicz, S. Rosinski.

Vol V, No 6, 1960, pp 205-208. 9203231 Hydro-Aromatic, Aromatic-Hydroaromatic and High-Molecular Compounds, by J. Jurkiewicz, S. Rosinski.

Earth Sciences & Astronomy

The Stability of Slopes, by I. V. Popov. RUSSIAN, bk.

CB

Symposium on the Geology of the Arctic, by V. V. Tkachenko, 9 pp. RUSSIAN, rpt, Leningrad, 1960.

MEB

Theoretical Problems in Petroleum Geology, by V. F. Linetskiy, 16 pp. RUSSIAN, rpt, 1962.

MEB

Scientific

Barth Sciences & Astronomy (Contd)

Foraminifera and the Carboniferous Stratigraphy of the Kara-Tau and Talas Section of the Ala-Tau, by O. I. Bogush, O. V. Yuferyev, 5 pp. RUSSIAN, rpt, Moscow, 1962.

MEB

The Problem of Cycles in Geologic History, by G. P. Leonov, 16 pp.
RUSSIAN, bulletin, Moscow, 1962.

MEB

Theoretical Problems in Petroleum Geology, 21 pp. RUSSIAN, rpt. Kiev, 1962.

MEB

Theoretical Problems in Petroleum Geology, by V. B. Porifryev, I. V. Gramberg, 26 pp. RUSSIAN, rpt, Kiev, 1962.

MEB

Physical Processes in Stellar Interiors, by D. A. Frank-Kamenetskiy. RUSSIAN, bk, Fizicheskie Protessy Vnutri Zvezd, Moscow, 1959.

NASA TT F-124

Plutonic Seismic Sounding of the Earth's Crust in the Soviet Union.
RUSSIAN, rpt, Glubinnoye Seismichoskoye Zondirovaniye Zemnoy Kory v SSSR, Leningrad, 1962, pp 35-77; 95-164.

*ACIC

Meteoric Matter and Some Geophysical Problems of the High Atmospheric Layers, by B. A. Mirtov, 20 pp.
RUSSIAN, bk, Iskusstvennyye Sputniki Zemli, No 4, 1960, pp 118-134. 9680365

AID Rpt T-63-29

Determination of the Amount of Oxygen Contained in a Liquid at Athospheric Pressure, by A. D. Reshetnikova, 11 pp. RUSSIAN, bk, Issletovaniye Nekotorikh Elementov Gidropneumoticheskogo Oborudovaniya Samoletov, pp 140-147, 1961. 9679898

FTD-TT-62-1653

Hydrodynamic Theory of Frontogenesis, by V. I. Gubin. RUSSIAN, bk, K Gidrodinemicheskoi Teorii Frontogeneza, 1960.

OTS 61-11469 PL-480

Chemistry and Technology of Combustible Shales and Their Products, by A. S. Sinel nikov. RUSSIAN, bk, Khimiya i Tekhnologiya Goryuchikh Slantsev i Produktov ikh Perorabotki, Leningrad, No 6, 1958.

OTS 61-11434 PL-480

Methods for a Detailed Study of Seismicity, by V. I. Bunz, M. V. Gzovskiy, et al, 544 pp. RUSSIAN, bk, Metody Detai'nogo Izucheniya Seysmichnosti, Moscow, 1960, pp 1-327. 9680518-V

FTD-TT-62-269

Objective Analysis and Forecast of Meteorological Elements.
RUSSIAN, bk, Objektivnyi Analiz i Prognoz
Meteorologicheskikh Elementov, Moscow, 1963,
pp 3-41, 54-62.

*Weather Bureau

Radiation Balance of Earth as a Planet, by K. Ya. Kondrat'yev. RUSSIAN, rpt, Obzory i Konsul'tatsiy, No 1, 1962, pp 50-56.

NLL M 5008

Principles of Historical Geology, by N. M. Strakhov. RUSSIAN, bk, Osnovy Istoricheskoi Geologii, Moscow, 1948.

OTS 61-31211 PL-480

Aurora Borealis, by Yu. I. Gal'perin, A. I. Yershkov, 45 pp. RUSSIAN, pamphlet, Polyarnyye Siyaniya, Vol IX, No 2, 1963.

JPRS 18276

The Determination of Laws of Distribution on the Basis of a Small Number of Observations, by V. V. Chavchanidze, V. A. Kumisishvili, 17 pp. RUSSIAN, bk, Primoneniye Vychislitel'noy Tekhniki diya Avtomatizatsii Proizvodstva, Mashgiz, Moscow, 1961, pp 129-139. 9668313

FTD-1T-62-1048

Regional Oceanography, Part I, by A. K. Leonov. RUSSIAN, bk, Regional naya Okeanografiya, Part I, 1960, pp 79-103.

*Navy/HO Tr 194

Regional Oceanography, by A. K. Leonov. RUSSIAN, bk, Regional'naya Okeanografiya, Part I, Leningrad 1960, pp 663-712, 728-748, 752-765.

*Navy/IIO Tr 193

.=----

Spectrophotometry of the Lunar Surface, by V. G. Teyfel', 10 pp.
RUSSIAN, bk, Spektrofotometriya Poverkhnosti Luny, Leningrad, 1960, pp 3-10. 9668351

FTD-TT-63-10

There are Seven Elements in the World, by M. Vasil'yev, K. Stanyukovich, 275 pp. RUSSIAN, bk, V Mire Semi Stikhiy, 1961, pp 1-255. 9680352

FTD-TT-62-960

The Radiometric Control of Soil Density, by V. G. Firstov.
RUSSIAN, per, Avtomobil nye Dorogi, Vol XXIV, No 4, 1961, pp 22, 23. 9203400

AEC-Tr-5512

Numerical and Distributional Changes of Small Mammals in the Northern Part of the Volga-akhtubinsk Floodplain Hydroelectric Power-Station, by N. A. Nikitina, I. L. Kulik, 10 pp. RUSSIAN, per, Byul' Moskov Obshch Ispytateley Prirody, Otdel Biologii, Vol LXVII, No 1, 1962, pp 15-22.

JPRS 18517

The Basic Changes in the Development of the Vegetation of the USSR North in Relation to Climatic Fluctuations and the Activity of Man, by B. A. Tikhomirov, 34 pp.
RUSSIAN, per, Byul' Moskov Obshch Ispytateley Prirody, Otdel Biologii, Vol LXVII, No 1, 1962, pp 34-58.

JPRS 18517

Effect of Blue-Green Algae on the Development of Zooplankton, by Ye. F. Manuylova, 6 pp. RUSSIAN, per, Byul' Moskov Obshch Ispytateley Prirody, Otdel Biologii, Vol LXVII (1), 1962, pp 128-131.

JPRS 18517

Some Unknown Organic Substances of Sea Water, by K. M. Khailov, 8 pp. RUSSIAN, per, Dok Ak Nauk SSSR, Vol CXLVII, No 5, 1962, pp 1200-1203. 9680338

Navy/NRL Tr 931

Radar Probes of the Planet Mercury, by V. A. Kotel'nikov, C. Ya. Cus'kov, 6 pp. RUSSIAN, per, Dok Ak Nauk SSSR, Vol CXLVII, No 6, Dec 1962, pp 1320-1323.

JPRS 18211

Intensification of Convective Heat and Mass Exchange in Pipes Using a Swirling Two Phase Flow, by R. Z. Alimov.
RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Tekh Nauk, Energet i Avtomat, No 1, 1962. 920340

AEC-Tr-5513

Magnetotelluric Sounding in Georgia, by G. A. Chernyavskiy, G. Ye. Gugunava, 8 pp. RUSSIAN, per, Iz Ak Nauk SSSR, Seriya Geofiz, No 1, 1963, pp 147-151.

JPRS 18401

481797 5

Research on Cloud Structure and the Scientific Tasks Connected With the International Year of the Quiet Sun, by A. Kh. Khrgian, 20 pp. RUSSIAN, per, Iz Ak Nauk SSSR, Seriya Geofiz, No 1, 1963, pp 169-176.

JPRS 18401

Statistical Characteristics of the Horizontal Component of Wind Velocity at Altitudes of 6 to 12 Km, by N. Z. Pinus, 7 pp. RUSSIAN, per, Iz Ak Nauk SSSR, Seriya Geofiz, No 1, 1963, pp 177-182.

JPRS 18401

A Two Dimensional Quantitative Spectral Classification of 238 05-B7 Stars and the Construction of a Spectral-Type Magnitude Diagram, by I. M. Kopylov.
RUSSIAN, per, Iz Krimskoy Astrofiz Observ, Vol XX, 1958, pp 156-206.

NLL RTS 2064

Lightning in Orbits, by V. Glazov, V. Vaneyer. RUSSIAN, np, Krasnaya Zvezda, 19 Jan 1963.

*ACSI 1-2355 ID 2229426

Selected Articles From the Russian Periodical Met i Gid.

No 2, 1961, pp 36-40. Simplified Method for the Estimation of Heat Balance of the Sea Surface, by Ya. A. Tyutnev. NLL M 3887

No 3, 1961, pp 3-10. Tropopause and Maximum Wind Speed Level, by N. Z. Pinus. NLL M 3981

No 8, 1961, pp 3-10. On Duirnal Temperature Course in Stratosphere, by L. A. Birjukova, V. G. Kastrov. *AFCRL Res Lab

No 12, 1962. Determination of the Movement, Heat, and Moisture, of Turbulent Flows According to Given Gradient Data, by A. B. Kazanskiy, A. S. Monin, 13 pp, (pp 3-8). JPRS 18141

On a Method for Predicting Humidity, Cloud Cover, and Precipitation Fields, by L. A. Kuznetsov, 14 pp, (pp 9-15).

Selected Articles From the Russian Periodical Met i Gid. (Contd)

No 12, 1962.

JPRS 18141

Thermodynamic Characteristics of the Boundary Layer During Fog and Low Cloud Cover, by A. N. Koviza, 14 pp, (pp 21-25).

A Method for Calibrating a Radar Set by Rainfall Intensity, by A. M. Dimaksyan, N. V. Zotimov, 13 pp, (pp 40-43).

Turbulence Measurements on High-Speed Aircraft, by Ye. I. Sofiyev, 5 pp, (pp 44, 45).

Literature on Meteorology, Hydrology, and Oceanology Published in 1961, 10 pp, (pp 51-56).

With the Institutions of the Hydrometeorological Service, 5 pp, (pp 56, 57).

With the Central Methodical Commission on Meteorological Forecasting, 5 pp, (pp 57, 58).

No 1, 1963.

JPRS 18306

Investigation of the Stratosphere in the USSR by Means of Meteorological Rockets, by I. A. Khvostikov, M. N. Izakov, 10 pp, (pp 3-8).

Statistical Entropy as an Index of Simularities of Differences of Meteorological Fields, by N. A. Bagrov, 11 pp, (pp 9-15).

Telemetry in Foreign Oceanography, by V. M. Lifshits, 7 pp, (pp 53-55).

Application of Seismo-Acoustic Radiobuoys for Studying the Earth's Crustal Structure in the Area of the Indian Ocean, by Yu. P. Neprochnov, G. N. Lunarskiy, 25 pp. RUSSIAN, per, Okeanologiya, Vol III, No 1, 1963, pp 76-87.

JPRS 18425

High-Altitude Atomic Explosions, Disturbances in the Ionosphere and Near-Earth Space, by Ya. L. Alpert. RUSSIAN, per, Priroda, Vol LI, No 8, 1962, pp 3-13. 9203398

AEC-UCRL Tr-890(L)

On Searching for Traces of Civilizations in Other Worlds, by M. A. Voronin. RUSSIAN, per, Priroda, No 11, 1963, pp 78-83.

*NASA TT F-164

An Experiment in Radiogeodetic Position Correlation in Detailed Aeromagnetic Surveying, by A. M. Lozinskaya, L. E. Mindlin.

RUSSIAN, per, Sbornik Statei, Prik Geofiz, Vol XXIV, 1960, pp 213-221.

A CONTRACTOR OF THE PROPERTY O

NLL RTS 2097

Meteotron - A Factory of Clouds, by L. Berne, 6 pp. RUSSIAN, per, Tekhnika - Molodezhi, No 12, 1961, pp 28-30.

JPRS 18235

Five Steps Into the Empire of Plutonic Theory, by L. Bobrov, 6 pp. RUSSIAN, per, Tekhnika - Molodezhi, No 12, 1961, pp 34-36.

JPRS 18235

Some Quantitative Characteristics of the Evolution of Depressions, by N. I. Yakovleva. RUSSIAN, per, Trudy Glav Geofiz Observ, No 114, 1960, pp 47-60.

NLL N 5009

Comparative Characteristics of Data on Atmospheric Ozone Obtained During the International Year at Several Stations, by G. P. Gushchin, R. G. Romanova. RUSSIAN, per, Trudy Glav Geofiz Observ, No 106, 1961, pp 37-43.

NLL M 5006

The Distribution of Disperses Elements Throughout the Components of Water Basins, by N. V. Timofeyev-Resovskiy, 9 pp. RUSSIAN, per, Trudy Inst Biologii, No 12, 1950, pp 189-193. 9080006

FTD-TT-62-1314

Experimental Studies of the Scattering of Sound Waves in the Atmosphere, by M. A. Kallistratova. RUSSIAN, per, Trudy Inst Fiz Atmosfery, Ak Nauk SSSR, No 4, 1962, pp 203-256.

*FTD-TT-63-441

Selected Articles From the Russian Periodical Trudy Inst Zemnogo Magnetizma, Ionosfery i Rasprostraneniya Radiovoln Ak Nauk SSSR.

No 17 (27), Noscow, 1960. 9680264 Compilation of Predictions of the Geometric Parameters and the h'f Frequency-Height Curves of the Ionosphere, by B. S. Shapiro, 34 pp, (pp 216-239). FTD-TT-62-1330

A Short-Range Prediction of the State of the Ionosphere, by L. N. Laykhova, 72 pp, (pp 240-281).

and the second s

entrantes of the second of the

Selected Articles From the Russian Periodical Trudy Inst Zemnogo Magnetizma, Ionosfery i Rasprostraneniya Radiovoln Ak Nauk SSSR. (Contd)

No 19 (29), 1961. 9679793
The Procedure for Forecasting Ionospheric and
Magnetic Disturbances and the Short-Range Forecast Service at Izmiran, by L. N. Lyakhova, 28 pp,
(pp 1-17).

Ionospheric Disturbances at High Latitudes and the Possibility of Forecasting Them, by R. A. Zevakina, 25 pp. (pp 18-30).

Regularities of Es Layer and Their Use in Radio Forecasting, by T. S. Kerblay, 28 pp, (pp 96-112).

Radar Scattering by Nonspherical Particles, by A. B. Shupyatskiy.
RUSSIAN, per, Trudy Tsentral Aerolog Observ, No 30, 1959, pp 39-52.

*AFCRL Res Lab

FTD-TT-62-1331

Selected Articles From the Russian Periodical Trudy Tsentral Inst Prognogov.

No 104, 1961. On the Effect of the Rotation of the Earth on the General Circulation of the Atmosphere, by R. F. Usmanov, (pp 3-40).

NLL M 5010

A Statistical Evaluation of Prognostic Equation Parameters, by G. I. Morskoy, (pp 118-122).

*Weather Bureau

No 103, 1962. On a Way of Finding the Sign of the Five-Day Air Temperature Anomaly Two Months Ahead, by S. T. Pagava, N. A. Sevalkina, (pp 3-15).

NLL M 5005

A Method of Improving the Mean Monthly Air Temperature Anomaly Forecast, by D. A. Ped, V. F, Kozel'cheva, (pp 16-30)

NLL M 5011

On Improving the Forecast of Air Temperature Anomaly in a Season, by D. A. Ped, T. B. Sidochenko, (pp 31-38).

NLL M 5007

Method of Preventing Signal Distortions Caused by Multipath Propagation in Meteor Communications, by V. V. Sidorov. RUSSIAN, Patent No 147,608, 17 Apr 1961, 2 pp.

*FTD-TT-63-434

Thermodynamic and Dynamic Processes in Interaction of Meteors With Upper Atmosphere, by Liu Chen-Hsing. CHINESE, per, Chung Kuo K'o Hsueh, Vol XII, No 1, 1963, pp 121-135.

*FTD-TT-63-426

Selected Articles From the French Report Communications of L'Observatoire Royal de Belgique, Brussels, 1962.

ACIC

No 200.

Solar Eclipse of February 15, 1961. Utilization of Photographic Observations of the Last Contact Made by M. S. Ruland in Laigueglia, Italy, by J. Dommanget.

The Effects of the Irregularities of the Lunar Profile or the Determination of the Times of External Contacts During a Solar Eclipse, by J. Dommanget.

No 208, pp 1-11. Recent Researches on the Form of the Mean Lunar Profile, by J. Dommanget.

Tellurometer Measurements in G. senland, 1959, by Albert Bauer.

FRENCH, rpt, Expeditions Polaires Francaises, Expedition Glaciologique Internationale au Groenland, Extracted From Geometric, No 12, Issue 227, 1961, pp 1-7.

ACIC

International Glaciologic Expedition to Greenland. Photogrammetry and Glaciology, by Baussart, Carbonnell. FRENCH, per, Bulletin de la Societe Française de Photogrammetrie, No 3, 1961, pp 1-40.

ACIC

Wind Profile, Internal Friction, and Energy Conversion in the Lower 500 Meter Level Above the Sea, by Heinz Lettau, 16 pp.

GERMAN, per, Beitraege zur Physik der Freien Atmosphare, 1957, pp 78-95.

ACSI I-2163 ID 2227647

Cloud Observations Using a Double-Wave Radar Apparatus by H. Borchardt.

GERMAN, per, Beitrage zur Physik der Freien Atmosphare, Vol XXXV, 1962, pp 43-68.

*AFCRL Res Lab

Tritium and Deuterium in Atmospherie Hydrogen, by B. Gonsior, I. Friedman. GERMAN, per, Z fuer Naturforschung, Vol XVIIa, No 12, 1962, pp 1088-1091.

*AERE Harwell

Radiation-Induced Turgor Movements Radionasty in Mimosa and Other Sensitive Plants, by O. Hug, H. Miltenburger. GERMAN, per, Die Naturwissenschaften, Vol XLIX, No 21, 1962, pp 499, 500.

*AERE Harwell

The Thermodynamics and Kinetics of Soil Moisture; Experimental Testing of the Theory With Radioactive Tracers, by S. V. Nerpin, A. M. Globus, et al. HINDU, rpt, Proceedings of a Symposium on' Radioisotopes in Soil Plant Nutrition Studies, Bombay, 26 Feb-2 Mar 1962, pp 135-158. 9203649

AEC-Tr-5510

Neutrino Astronomy, by Gyorgy Marx, 17 pp. IIUNGARIAN, por, Fizikai Szemle, Vol XIII, No 1, 1963, pp 13-20.

JPRS 18605

An Investigation of the Fine Structure of the F Layer of the Ionosphere, by N. T. Tsymbal, 9 pp.
UKRAINIAN, per, Informatsionnyy Byull Ak Nauk Ukrain RSR, Organizatsionnyy Komitet po Provedeniyu Mezh Geofiches Goda, Mezh Geofiz God, No 3, 1961, pp 19-23.
9680267

FTD-TT-62-1388

Scientific Electronics

Ferrites at Microwave Frequencies, by A. G. Gurevich, 329 pp.
RUSSIAN, bk.

High Power Electronics, by P. L. Kapitsa.
RUSSIAN, bk, Moscow, 1962, 190 pp.

Selected Articles From the Russian Report
Conference on Nuclear Electronics, Belgrade, 15-20 May 1961.

Vol II, 1962. A Timo Selector for Analyzing Pulse Trains, by V. G. Brovchenko, Yu. D. Molchanov, (pp 81-86), 9203407

Multi-Channel Time-Analyzer with Electrostatic Memory Tube, by K. G. Ignatyev, I. V. Kirpichnikov, et al, (pp 215-219).

A 256-Channel Measuring and Recording System, by I. S. Krasheninnikov, S. S. Kurochkin, et al, (pp 221-235). 9205403

Trigger Feed of a Pair of Gelger-Muller Counters, by L. Mitrani, B. Betev, (pp 379-384). 9203401

Vol III, 1962. A Multi-Channel Coincidence Circuit with Short Time Intervals, by N. Vysochanskiy, S. V. Mukhin, et al, (pp 49-58). 9204985

An Eight-Channel Hodoscopic Circuit Using Scintillation Detectors, by Yu. D. Bayukov, Yu. M. Zaitsev, et al, (pp 309-321). 9204986

Indicator Devices for Radar Stations, by V. I. Rakov. (NY-7562)
RUSSIAN, bk, Indikatornyye Ustroystva Radiolokatsionnykh
Stantsiy, Leningrad, 1962, pp 1-532.

Cathode Ray Tube Screens, by V. I. Rakov, 6 pp. RUSSIAN, bk, Indikatornyye Ustroystva Radiolokatsionnykh Stantsiy, Chapter III, Leningrad, 1962, pp 205-208.

Lamps, Tubes with Cold Cathode, by L. N. Korablev. RUSSIAN, bk, Lampy s Kholodnym Katodom, 1961, 176 pp.

Fundamentals of Radar, by A. G. Saybel', 402 pp. RUSSIAN, bk, Osnovy Radiolakatsii, 1961, pp 1-384. 9680353

CB

*FTD-TT-63-356

AEC-Tr-5547

AEC-Tr-5407

AEC-Tr-5508

AEC-Tr-5509

AEC-Tr-5586

AEC-Tr-5584

*JPRS

JPRS 18362

FTD-TT-62-1215

*FTD-TT-63-422

Selected Articles From the Russian Book Radioreleynaya Svyaz, 1962. Encl No 1 to R-360-62, OARNA, Moscow.

ACSI I-2218 ID 2217963

Principles of Radio Relay Communications and Wavebands, (pp 5-12).

Multiplexing Radio Relay Lines According to Time, (pp 44-59).

Types of Pulse Modulation, by N. M. Izyumov, (pp 60-74).

Some Laws of Metal Electrodeposition Under the Influence of an Altornating Current, by A. A. Sutyagina, K. M. Gorbunova. RUSSIAN, bk, Trudy Chetvertogo Soveshaniya po Electrokhimii, Hoscow, 1956, pp 414-420.

NLL M 3997

High Resistance Coramic Materials for High Voltage Insulators, Part II, by S. M. Rozintsvoyg, S. A. Kudrina.
RUSSIAN, bk, Voprosy Razvitiya Stokol'noy i Farforo-Payansbvoy Promyshlemosti Sbornik Ak Nauk UKSSSR, 1962, pp 188-190.

*FTD-TT-63-269

Capacitance and Semi-Conductor Shunts in Intrinsically Safe Circuits, by M. A. Rol'nik. RUSSIAN, per, Bezopasnost' Truda v Promyshlennosti, Vol VI, No 1, 1962, pp 18-20.

NLL M 5003

Concorning Gates, by B. I. Nechiporuk, 9 pp. RUSSIAN, per, Dok Ak Nauk SSSR, Vol CXLVIII, No 1, 1963, pp 50-53.

JPRS 18244

Selected Articles From the Russian Periodical Elek Stantsii.

No 9, 1961, pp 55-59. The Technology of the Dynamic Balancing of Turbo-set Rotors on the Site of Their Installation, by S. I. Mikumis.

NLL M 5040

No 11, 1961, pp 53-56. The Appearance of Inter-Turn Short-Circuits in the Windings of the Moving Rotors in Turbo-Generators, by R. M. Manevich.

NLL M 5036

Selected Articles From the Russian Periodical Elek Stantsii. (Contd)

LICK States 11. (Conta)	
No 1, 1962, pp 51-54. Determining the Permissible Degree of Moisture for Transformer Insulation, by V. I. Zvezdkin.	NLL M 5038
No 2, 1962, pp 59-62. The Relation Between the Wet Flashover Voltage of Insulators and the Duration of the Voltage and the Intensity of the Rain, by H. V. Kalinin.	NLL M 5039
No 1, 1963, pp 7-13. Bratskaya Hydroelectric Power Station, by A. D. Sakov, B. Z. Unanskiy, 15 pp.	JPRS 18357
Motor Coach Unit With Silicon Rectifiers, by B. N. Tikhmonev, V. D. Radchenko. RUSSIAN, per, Elek i Teplov Tyaga, No 8, 1961, pp 36-39.	NLL M 5033
The Series K A. C. Locomotive With Silicon Rectifiers, by I. P. Il'in. RUSSIAN, per, Elek i Toplov Tyaga, No 1, 1962, pp 32-37.	NLL M 5047
Anti-Skidding Circuits for the VL22M and VL 23 Electric Locomotives, by B. G. Bove. RUSSIAN, per, Elek i Teplov Tyaga, No 4, 1962, pp 27-32.	NLL M 5043
Selected Articles From the Russian Periodical Elektrichestvo.	
No 6, 1938, pp 34-40. Effect of Field Voltage Variations on the Small Vibrations of the Rotar of a Synchronous Machine, by M. M. Botvinik.	NLL M 5041
No 7, 1961, pp 7-13. The Effect of Excitation Systems on the Stability of Parallel Operation of Large Turbo-Generators, by V. M. Borrov, I. A. Glebov.	NLL M 5035
No 1, 1962, pp 73-75. Calculation of Transients in Complex Circuits With Several Non-Linear Elements, by A. F. Berezovskiy.	NLL N 5046
No 2, 1962. Controllable D. C. Machines With Permanent Magnets and Unsymmetrical Poles, by L. M. Palastin, A. M. Lapshinov, (pp. 48-51).	NLL M 5042
Technical Fundamentals for Working Out a New Standard for Electrical Brushes, by O. G. Vegner, (pp 77-83).	NLL M 3915

Complete Electrification -- Goal of Electric Power Ministry, by P. S. Neporozhniy, 16 pp. RUSSIAN, per, Gidrotekhnicheskoye Stroitel'stvo, No 1, 1963, pp 3-12.

Improvement of Television Receivers Hampered by Technical Policies, by B. Aliyevskiy, 6 pp. RUSSIAN, np, Izvestiya, 22 Sep 1962, p 3.

JPRS 17998

JPRS 18357

Technical Conservatism at the Kremenchugskaya Ces, by A. Dolonko, 7 pp. RUSSIAN, np. Izvestiya, 8 Dec 1962, p 3.

JPRS 18616

The Parameters of a Turbogenerator With a Special Exciting Winding, by G. A. Koval'kov. RUSSIAN, per, Iz Ak Nauk SSSR Otdel Tekh Nauk, Energet i Avtomat, No 1, 1962, pp 70-78.

NLL M 5044

A Method of Synthesizing a Nonstationary Automatic Control System by a Given Function of Weight, by D. I. Gladkov, S. V. Mal'chikov, 6 pp. RUSSIAN, per, Iz Ak Nauk SSSR, Otdol Tekh Nauk, Energet i Avtomati, No 1, 1962, pp 166-169.

ACSI 1-2383 ID 2229430

A Method for Probe Studies of a D-C Corona Field Using an Oscillograph, by V. I. Levitov, A. G. Lyapin, 15 pp.
RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Tekh Nauk, Energet i Avtonatika, No 2, 1962, pp 47-54.
9679893

FTD-TT-62-1530

On the Theory of Combined Systems of Control of Interrelated Variables, by B. V. Il'in, 21 pp. RUSSIAN, per, Iz Vysshikh Ucheb Zaved, Blek, No 6, 1962, pp 632-645. 9668245

FTD-TT-62-1834

Biological Radio Communication, by B. Kazhinskiy, 13 pp. RUSSIAN, np. Rabochaya Gazeta, 13, 15, 16 May 1962, p 4. 9668362

FTD-TT-62-1876

Attaining Radiospectroscope Limit Sensitivity for Observation of Electron Paramagnetic Resonance, by V. A. Atsarkin, M. E. Zhabotinskiy, et al. RUSSIAN, per, Radiotekhnika i Elekronika, No 5, May 1962, pp 866-873. 9203636

AEC-SCL-T-449

Moscow Electronics - Automatic Control Systems Built by Tizpribor Plant, by V. Sinedubskiy, 5 pp. RUSSIAN, np, Sovet Rossiya, 20 Oct 1962, pl.

JPRS 18598

The Structure of Functions With a Limited Spectrum and Related Problems in Communications Theory, by B. S. Tsybakov, V. P. Yakovlev, 16 pp. RUSSIAN, per, Trudy Instituta, Moskov Fiz-Tekh Institut, Issled po Fiziko i Radiotekhnike, No 2, 1958, pp 13-29.	JPRS 18510
Equipment for the Supervision of the Electrical Parameters of the Elements of Traction Machines, by A. E. Skylarov. RUSSIAN, per, Vest Elektroprom, No 5, 1961, pp 54-58.	NLL M 5032
Analysis of Gas Motion and Heat Transfer in Rotating Rotors, by V. V. Mal'tsev. RUSSIAN, per, Vest Elektroprom, No 11, 1962, pp 15-22.	*FTD-TT-63-366
Application of the Method of the Partial Separation of Variables to Two Ezuivalent p-Electrons, by A. P. Yutsis. RUSSIAN, per, Zhur Eksper i Teoret Fiz, Vol XXIII, 1952, pp 357-370.	*NASA TT F-152
Automatic Electronic Multipoint Temperature Control Device, by A. Kh. Udovichenko, G. I. Reshetov. RUSSIAN, Patent No 147,044, 6 Jul 1960, 3 pp.	*FTD-TT-63-430
Method of Converting an A. M. Signal Into a Quantized Pulse-Duration-Modulated Signal, by B. I. Nosov. RUSSIAN, Patent No 147,255, 10 Feb 1961, 2 pp.	*FTD-TT-63-432
Apparatus for Obtaining Static Magnetic Characteristics of Ferromagnetic Materials, by V. A. Kadkin. RUSSIAN, Patnet No 147,672, 11 Feb 1961, 3 pp.	*FTD-TT-63-435
Increase in Range of Surveillance Radars, by Miomir Ivanovic, Aleksander Razingar. CROATIAN, per, Vojnotehnicki Glasnik, No 11, 1962,	*ACSI 1-2397-A
pp 811-826. System for Eliminating Fixed Reflections, by Milos Sredojevic.	10 2229438
CROATIAN, per, Vojnotehnicki Glasnik, No 11, 1962, pp 827-829. Threshold of Brightness Perception on Cathode-Ray	*ACSI I-2397-B ID 2229438
Tubes, by Foache, 26 pp. FRENCH, rpt, Brusc Underwater Detection Laboratory, Transmission Section, Report No 5208/DSM/B.	Navy Tr 3347 BuShips

The Influence of the Cathode-Ray Tube on the Perception Ratio in Panoramic Observation (Brightness Modulation), by Foache, 7 pp. FRENCH, rpt, Bruse Underwater Detection Laboratory, Transmission Section, Report No 5218/DSM/B.	Navy Tr 3348 BuShips 796
Directivity in Several Systems of Passive Detection by Foache, 14 pp. FRENCH, rpt, Bruse Underwater Detection Laboratory, Transmission Section, Report No 9638/DSM/B, 4 May 1962.	Navy Tr 3350 BuShips 798
Delayed Neutrons Dotoction in Canning Burst Petection Studies, by G. Perlini. FRENCH, rpt, CEA 2101, 1961. 9205008	Al:C-Tr-5609
Standardization of Electronic Components; Rules for Certification, 11 pp. FRENCH, rpt, Committee for the Coordination of Telecommunications (CCT) Organizational Document, No 7, 26 Jan 1961.	Navy Tr 3346 BuShips 785
Centralized Quality Control for Electronic Components, 11 pp. FRENCH, rpt, Committee for the Coordination of Telecommunications (CCT), Organizational Document No 10, 1961.	Navy Tr 3345 BuShips 784

Photomultipliers in Experimental Physics, by G. Pietri. FRENCH, per, Acta Electronica, Vol V, No 1, 1961, pp 7-30. 9203662	AEC-UCRL-Tr-879-1
Effects of Precision in the Manufacture of Antennas on Their Performance, by J. Robieux, 42 pp. FRENCH, per, Annales de Radioelectricite, Vol XI, No 43, Jan 1956, pp 29-56.	ACSI I-8284 ID 2224771
The Amplitude Variations in a Match (Timepiece), by P. Bercot, P. Altenburger, FRENCH, per, Berichtsbuch des VI. Congres International de Chronometrie, 11: June 19-23, 1959, pp 799-813.	*AEC
The Use of Thermocouple to Study the Appearance and Development of Cavitation in Certain Liquids Subjected to Ultrasound. FRENCH, per, Comptes Rendus, No 254, 1962.	*US Res Lab Tr 27

Electronics (Conta)	
Type EMB-3 Radiation Detector (Operating Manual). GERMAN, rpt, Strahlensuchgeraet EMB-3 (Bedienungsanleitung), Encl No 1 to RD-113-62, 1962, 23 pp.	*ACSI I-2403-A ID 2219739
Type EMB-3 Radiation Detector (Pistributor and Customer Service). GERMAN, rpt, Strahlensuchgerset EMB-3 (Vertrieb und Kundendienst), Encl No 2 to RD-113-62, 1962, 4 pp.	*ACSI 1-2403-B ID 2219739
Pulse Methods for Measuring the Reflection From Underwater Sound Absorbers in Tubes, by Walter Kuhl, Hermann Oberst, 21 pp. GERMAN, per, Acustica, Vol III, 1953, pp 421-433.	Navy Tr 3365 USRL 23
Radar Engineering, by Schmidt. GERMAN, per, Aerosport, No 1, 1963, p 27.	*FTD-TT-63-442
Circuits for Ternary Switching Variables, by Eugen Muhldorf. GERMAN, per, Archiv der Elektrischen Ubertragung, Vol XII, No 4, April 1958, pp 176-182. 9203410	AEC-SCL-T-452
Critical Considerations for X-Ray Television With the Image Orthicon and the Vidicon, by P. Janker, A. Stangen. GERMAN, per, Fortschritte auf dem Gebiete der Rontgenstrahlen und der Nuklearmedzin, Vol XCIV, No 5, 1962, pp 630-636. 9205013	AEC-NP-Tr-939
The Reliability of Communications Engineering Hardware, 14 pp. GERMAN, per, Machrichtentechnik, No 2, 1962, pp 68-71. 9668239	FTD-TT-62-1820
Duplex Operation Transmission System With Feedback Supressors, 6 pp. GERMAN, Patent No 526,405.	Patent Office
Low Frequency Transistor Amplifier That Compensates for the Effect of Temperature Fluctuations on the Operating Point of the Output Stage, 9 pp. GERMAN, Patent No 1,027,728.	Patent Office
Electrical Engineering Achievements of Budapest University, by Hiklos Polgar, 17 pp. HUNGAKIAN, per, Elektrotechnika, Vol LV, No 12, 1962, pp 567-573.	JPRS 17840
Influence of Side-Tone on the Quality of Transmission, by P. Schiaffino. ITALIAN, per, Alta Frequenza: Rivista de Radiotecnica, Telefonia e Acustica, Applicata, Vol XXX, No 11, 1961.	NZDIA

pp 324-326.

On the Pitch Sensation and the Fundamental Frequency Extraction of Speech Sounds, by Toshitaka Sugimoto. JAPANESE, per, Electrical Communication Laboratory Technical Journal, Vol XI, No 2, 1962, pp 327-368. *AFCRL Res Lab Experiments on Microwave Emission at Cyclotron Harmonics of a Cold Plasma (I), by Kenji Mitani, Hiroshi Kubo, et al. JAPANESE, per, Kaku Yugo Kenkyu, Vol IX, No 3, 1962, pp 267-304. 9203652 AEC-Tr 5564 Synthesis of the Characteristics of Linear Antenna Systems, by P. Szulkin, 35 pp. POLISH, per, Prace Przemyslowego Instytutu Telekomunikacji, Vol X, No 30, 1960, pp 15-30. 9680008. FTD-TT-62-1141 Electrolytic Precipitation of Substances for Synthesis of High Quality Ferrites, by F. Fonick, W. Nowakowski. POLISH, per, Przeglad Elektroniki, No 8, 1962, *FTD-TT-63-348 pp 487-503. Evaluation of Ultra High Vacuum With Field-Emission Microscope, by W. Lenkow, C. Workewski. POLISH, per, Przeglad Elektroniki, No 11, 1962, pp 646-648. *FTD-TT-63-377 Method of Experimental Study of Radiowave Scatter Propagation Conducted Within the Country and the Results Obtained, by Janusz Molski. POLISH, per, Przeglad Telekomunikacyjny, No 7, 1962, *ACSI I-2404-A pp 197-202. ID 2229441 Type Tg N24 DK Multiplex Telegraphy Devices, by Jan Bienczak. POLISH, per, Przeglad Telekomunikacyjny, No 7, 1962, *ACSI I=2404-B pp 202-206. ID 2229441 Communications in the USSR, by Romuald Kosielski,

JPRS 18219

POLISH, per, Przeglad Telekomunikacyjny, No 11, 1962,

Scientific Engineering

Aspirator for Taking Air Samples -- Model 822, 9 pp.
RUSSIAN, bk, Aspirator Dlya Otbora Prob Vozdukha -- Model 822, No 440-2000, 16 Jun 1961, pp 1-14.

JPRS 18345

Electric Drills for Sinking Oil and Gas Boreholes, by F. N. Fomenko.

RUSSIAN, rpt, Elektrobury dlya Bureniya Neftyanykh i Gazovykh Skvazhin, 1961, pp 1-21.

*ACSI I-2450 ID 2229450

Hydrodynamics of an Emplosion, by Yu. S. Yakovlev. RUSSIAN, bk, Gidrodinamica Vzryva Sudpromgiz, Leningrad, 1961, 312 pp.

*FTD-TT-63-381

Measurement of Linear Accelerations, by
N. P. Rayevskiy, M. I. Subbotin, 74 pp.
RUSSIAN, bk, Izmereniye Lineynykh Uskoreniy,
Moscow, 1961, pp 1-62. 9668361

FTD-TT-62-860

Comprehensive Utilization of the Water Resources in the Amur River Headstrems; Prospects Connected With Power Engineering Development, by I. M. Gusev, 63 pp.

RUSSIAN, bk, Kompleksnoye Ispol'zovaniye Vodnykh Resoursov Istokov Amura i Perspektivy Razvitiya Energetiki, Moscow, 1959, pp 8-83. (Call No. TC86 A5U49 cop 2)

Army Map Service

Working Processed Cyclos in Thermal Engine Installations. RUSSIAN, bk, Rabochiye Protessy v Teplovykh Dvigatelnykh Ustanovkakh, Oborongiz, 1960.

*FTD-TT-63-403

Design of Antennas With Compound Exciter, Chapter III, by V. M. Ginzburg, I. N. Belova, 35 pp.
RUSSIAN, bk, Raschet Parabolicheskikh Antenn,
Izdatel'stvo Sovetskoye Radio, 1959, pp 91-120.
9668336

FTD-TT-62-1520

Standardization in Mechanical Engineering, by T. A. Vvedenskiy.

RUSSIAN, bk, Standartizatsiya i Normalizatsiya v Mashinostroenii, 1957. OTS 61-31197 PL 480

Fiberglass Building Materials, by T. M. Barbarina, M. P. Sukhov, 172 pp.
RUSSIAN, bk, Steklovoloknistyye Stroitel'nyye Materialy, Moscow, 1961, pp 1-168.

JPRS 18380

Technology of Manufacturing Volumes Shells, Housings of Furnaces, Air Heaters and Cement Furnaces, by S. A. Kurkin, 33 pp. RUSSIAN, bk, Tekhnologiya Izgotovleniya Svarnykh Konstruktsiy, Atlas Chertezhey, 1962, pp 67-80, 9680461

FTD-TT-62-1615

Gyroscope Drift Caused by Friction of the Gimbal Bearings and Reduction of This Drift by the Use of Rotating Bearings, by Ye. M. Rodionov, 16 pp. RUSSIAN, bk, Trudy Instituta, Nekotoryye Voprosy Sovremennoy Tekh Priborostroyeniya, No 52, Oborongiz, Moscow, 1961, pp 33-44. 9680514

FTD-TT-62-1900

Voltage Regulator for Semiconductor Elements, by I. M. Gershuni, A. N. Karaulov. RUSSIAN, bk, Tsifrovaya Tekhnika i Vychislitel'nyye Ustroystva, No 3, 1962, pp 110-115.

*NASA TT F-155

On the Dependence of the Coefficient of Conservation of Pressure of a Retarded Flow on the Velocity Factor in the Supersonic Section of a Laval Nozzle With Incomplete and Complete Expansion of the Gas in the Nozzle, by V. S. Ivanov, 10 pp. RUSSIAN, per, Aviats Tekh, No 1, 1962, pp 75-81. 9680147

FTD-TT-62-1643

The Temperature of a Weld Pool, by I. K. Pokhodnya, I. I. Fruman, 11 pp.
RUSSIAN, per, Avtomat Svarka, No 5, 1955, pp 14-24.
9205208

ACSIL Tr 1283

Time Pace Conversion of Sequential Machines and the Synthesis of Relay Circuits, by M. A. Ayzerman, L. Z. Gusev, et al. RUSSIAN, per, Avtomat i Telemakh, Vol XXIII, No 11, 1962, pp 1465-1491.

*FTI)-TT-63-363

Experience of Investigating the Noise and Vibration of Cars Made by Gorki Autoworks, by A. Ya. Tarasov. RUSSIAN, per, Avtomobil Prom, No 11, 1961, pp 28-32.

NLL M 8818

Use of Fuel Ash in the Latvian SSR, by G. Ya. Kunnos, B. Ya. Lindenberg.
RUSSIAN, per, Beton i Zhelezobeton, No 2, 1961, pp 68-83.

NLL M 8812

Excerpts From New Safety Equipment, by E. F. Burtsev. RUSSIAN, per, Bezopasnost' Truda v Prom, Vol VI, No 7, 1962, pp 13-17.

NLL N 5001

The Bending of a Circular Plate With an Eccentric Opening, Hole, by a Concentrated Force, Theory of Elasticity, by N. V. Kudryavtsev. RUSSIAN, per, Dok Ak Nauk SSSR, Vol LIII, No 2, 1946, pp 107-110. 9204996	AEC-SCL-Tr-456
One Class of Turing Machines, by N. V. Belyakin, 7 pp.	
RUSSIAN, per, Dok Ak Nauk SSSR, Vol CXLVIII, No 1, 1963, pp 47-49.	JPRS 18244
Energy Potentialities of High Temperature Gas Turbines, by D. I. Maryev. RUSSIAN, per, <u>Elektricheskiye Stantsii</u> , Vol XXXII, No 10, 1961, pp 18-22.	NLL M 6375
Protecting the Blades of Steam Turbines Against Erosion, by A. M. Kornienko. RUSSIAN, per, <u>Elektricheskiye Stantsii</u> , No 6, 1962, pp 73, 74.	NLL M 5027
Power Losses in a Turbine Stage due to the Lashing Wires, by I. I. Kirillov, R. B. Kuz'michev. RUSSIAN, per, Elektricheskiye Stantsii, No 7, 1962, pp 38-42.	NLL M 5030
Compensated Commutating Mechanical Rectifiers, by A. Ye. Kaplyanskiy, P. I. Petrov, 14 pp. RUSSIAN, per, <u>Elektrichestvo</u> , No 3, 1958, pp 52-56. 9668318	FTD-TT-63-34
Special Considerations in Selecting the Armature Windings of Certain DC Machines, by I. Z. Agoyev. RUSSIAN, per, Elektrichestvo, No 11, 1961, pp 48-55.	NLL M 5037
Flow Round a Butterfly Valve and the Effect of Its Impact on the Valve, by B. I. Yan'shin. RUSSIAN, per, <u>Energomashinostroyeniye</u> , No 5, 1958, pp 6-9.	NLL M 3891
Generalised Characteristics of Butterfly Valves With Flattened Discs, by I. B. Yan'shin. RUSSIAN, per, Energomashinostroyeniye, No 9, 1957, pp 18-21.	NLL M 3892
The Influence of a Convergent Transition Piece Downstream of a Flat-Walled Butterfly Valve on the Valve Characteristic, by B. I. Yanshin. RUSSIAN, per, Energomashinostroyenie, Vol VII, No 7,	
1961, pp 16-19.	NLL M 3992

Ventilation Losses in a Turbine Stage, by A. D. Mezheritskiy, 13 pp. RUSSIAN, per, <u>Energo-Mashinostroyeniye</u>, No 6, 1962, pp 29-32. 9668198

FTD-TT-62-1740

Calculating the Temperature Fields in the Bucket of a Gas Turbine Cooled Through Slots in the Assembly, by Ye. I. Molchanov, A. R. Khenvon, 11 pp. RUSSIAN, per, Inzhenerno-Fiz Zhur, Vol V, No 3, 1962, pp 45-50. 9679877

FTD-TT-62-1568

A Study of the Electrical Conductivity of a Flame by the Microwave Method, by E. P. Zimin, V. A. Popov, 10 pp.
RUSSIAN, per, Inzhenerno-Fiz Zhur, Vol V, No 3, 1962, pp 66-71. 9679877

FTD-TT-62-1568

Effect of an Electric Field on a Flame, by A. Ye. Potapenko, P. F. Kostenko. RUSSIAN, per, <u>Inzhenerno-Fiz Zhur</u>, Vol V, No 10, 1962, pp 73-76.

*FTD-TT-63-408

The Calibration of Infrasonic Hydrophones by the Null Method, by A. N. Golenkov, 17 pp. RUSSIAN, per, Issledovaniya v Oblasti Akusticheskikh i Gidroakusticheskikh Ismereniy, No 61 (121), 1962, pp 47-57.

JPRS 18442

Extraction of Metals From Molten Lead Slags Shaft Furnace Smelting by Cementation With Carbon Saturated Liquid Iron, by L. N. Sheludyakov. RUSSIAN, per, Iz Ak Nauk Kaz SSR, Seriya Khim, Vol I, No 13, 1958, pp 38-45.

NLL RTS 2129

On One System of Step-Type Extremal Control, by Ye. D. Garber, 11 pp.
RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Tekh Nauk, Energet i Avtomat, No 5, 1960, pp 169-173.
96802 70

FTD-TT-62-1884

Erosion and Deposition on Gas Turbine Blades Working in a Gas Containing Small Particles of Suspended Matter, by S. Sh. Rozenberg. RUSSIAN, per, Iz Ak Nauk SSSR Otdel Tekh Nauk, Energet i Avtomat, No 1, 1962, pp 111-115.

NLL M 3914

Supersonic Flow Around Triangular Flat Plate, by D. A. Melnikov. RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Tekh Nauk, Mekh i Mash, No 6, 1962, pp 33-39.

*FTD-TT-63-375

Supersonic Flow in Gas Ejector, by A. Ya. Cherkez. RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Tekh Nauk, Mekh i Mash, No 6, 1962, pp 40-49.

*FTD-TT-63-375

Selected Articles From the Russian Periodical Iz Vysshikh Ucheb Zaved, Aviat Tekh.

No 1, 1959, pp 81-88. Estimation of Characteristics of the Axial Flow Booster Impellers in Contrifugal Pumps, by I. V. Minolyubov.

*FTD-TT-63-418

No 1, 1962, pp 66-74. 9668346. Determining Optimum Geometric Parameters of Aviation Construction, by I. I. Drakin, 11 pp FTD-TT-62-1717

No 2, 1962. 9668364 Stability of a Circular Cylindrical Envelope in a Non-Uniform Temperature Field, by V. V. Kabonov, 9 pp. (pp 65-71).

FTD-TT-62-1644

A Method of Projecting and the Results of Investigating a Vancless Deflector for Radial-Axial Turbines, by A. V. Gubarev, et al, 14 pp, (pp 113-133).

Characteristic Throttling Features of Single-Shaft Bypass Turbojot Engines in Different Control Programs, by A. L. Klyachkin, A. G. Smirnov, 17 pp, (pp 138-151).

Selected Articles From the Russian Periodical Iz Vysshikh Ucheb Zaved, Blektromekh.

No 2, 1952. 9679900 Calculation of the Characteristics of Symmetrical-Pulse Induction Generators, by A. N. Tkachenko, 26 pp, (pp 140-154).

FTD-TT-62-1556

A Mathematical Analog of Transients of a Synchronous Machine Using Experimental Dynamic Characteristics, by Yu. A. Bakhvalov, 23 pp, (pp 155-167).

Calculating Sine Windings of Single-Phase Asynchronous Micromachines, by K. V. Pavlov, G. S. Somikhina, 18 pp, (pp 177-188).

A Single-Armature Converter With Superimposed Magnetization, by I. S. Kopylov, 11 pp, (pp 189-195).

A. I. Grechukhin.

Aerodynamic Characteristics of Graphite Particles, by Z. R. Gorbis, R. A. Rakhtiozin. RUSSIAN, per, Iz Vysshikh Ucheb Zaved, Energet, *FTD-TT-63-395 No 11, 1961, pp 101-104. On the Influence of Losses in the Runner on the Efficiency of a Radial-Axial Turbine, 10 pp. RUSSIAN, per, Iz Vysshikh Ucheb Zaved, linerget, FTD-TT-62-1801 No 4, 1962, pp 79-84, 9668253 Experimental BITM Air Turbines, by I. I. Kirillov, I. G. Gogolev, et al, 10 pp. RUSSIAN, per, Iz Vysshikh Ucheb Zaved, Energet, No 5, 1962, pp 119-122, 9680141 FTD-TT-62-1742 Causes of Vibration of Rapidly-Rotating Rotors With a Small Radial Gap in the Boarings, by A. Yu. Vinblad. RUSSIAN, per, Kotloturbostroenie, No 5, 1948, NLL M 6374 pp 26-28. New Principles in the Control and Standardization of the Operation of Marine Power Plants, by NLL Tr Bulletin V. Lysonko, 9 pp. Vol V No 1 1963 RUSSIAN, per, Morskoy Flot, No 9, 1962, pp 31, 32. Literature on Building, by I. Stanchenko, 15 pp. NLL Tr Bulletin Vol V No 1 1962 RUSSIAN, per, Novye Knigi, No 18, 1962, pp 56-63. Ultrasonic Welding of Plastics, by L. N. Skarokhodov. *FTD-TT-63-359 RUSSIAN, per, Plast Massy, No 11, 1962, pp 33-35. Study of Internal Stresses Arising in the Production of Products From Glass Textolite Material, by I. A. Kozlov, I. V. Lebedev, 9 pp. RUSSIAN, per, Plast Massy, No 1, 1963, pp 74, 75. JPRS 18271 Some Regularities in the Sintering of Powders of High-Melting Compounds, by G. V. Samsonov, M. S. Koval'chenko. RUSSIAN, per, Poroshkovaya Metallurgiya, Vol I, No 1, 1961, pp 20-29. NLL RTS 2119 Experiences in Measuring the Thickness of Ice dith Forms on the Inside Walls of the Main Pipeline, by *ACSI I-2389 ID 2229432 M. P. Suslov. 519th MI 3n RUSSIAN, per, Priborostroyenie, No 1, 1963, p 25. On the Problem of Methods of Estimating the Cutting Edge Sharpness of Cutting Tools, by

DS1k PTS 2162

RUSSIAN, per, Stanki i Instrument, No 5, 1949, pp 21, 22.

Calculation of the Forces Acting on the Rudder of a Twin-Screw Ship, by S. I. Devnin, V. V. Timofeyev. RUSSIAN, per, Sudostroyenie, Vol XXVIII, No 2, 1962, NLL N 5000 p 17. Argon-Arc Welding With Additional Argon Stream, by A. A. Alov, V. M. Shmakov, 9 pp. RUSSIAN, per, Svarochmoye Proiz, No 3, 1962, FTD-TT-62-1754 pp 13-16. 9680519 Lighting of Laternless Factory Buildings, by N. M. Gusev. RUSSIAN, per, Svetotekhnika, Vol VI, No 9, 1960, pp 22-24. NLL M 5052 Natural Illumination of State Picture Gallery USSR Mescow, by N. N. Kireyev. RUSSIAN, per, Svetotekhnika, Vol VI, No 10, 1960, NLL M 5051 The Problem of the Artificial Lighting of Factory Building with No Natural Daylighting, by N. I. Zoz. RUSSIAN, per, Svetotekhnika, Vol VI, No 11, 1960, NLL H 8807 pp 19-21. Selected Articles From the Russian Periodical Teploenergetika. No 6, 1961, pp 92, 93. NLL M 5031 Calculation of the Wall of a Steam Turbine Housing, by M. A. Rudis. No 8, 1961. Future Steam-Turbine Units of High Capacity, by L. A. Shubenko-Shubin, (pp 3-12). NI.L M 5024 Overlap and Energy Losses in a Turbine Stage, by D. 1. Morozov, (pp 12-17). NLL M 5025 Investigating the Operation of a Group of End Stages in the AR-4-3 Turbine, by A. V. Shchokoldin, V. N. Sapozhikov, (pp 18-23). NLL M 5026 No 11, 1961. Gas Turbines for Heavy-Duty Power Engineering, by L. A. Shubenko-Shubin, P. I. Korzh, (pp 5-12). NLL M 5045

NLL M 5028

The Autonation of the Combustion Process in a TP-40 Boiler, by L. S. Shunskaya, (pp 30-37).

_

Selected Articles From the Russian Periodical Teploenergetika. (Contd)

No 12, 1961, pp 60-63. An Experimental Investigation of Models of a Cooled Bolt, by O. T. Il'chenko.

NLL M 5023

No 5, 1962, pp 38-43. 9668350 Structural Strength of Gas Turbine Plates Under Unsteady Operating Conditions, by A. P. Dinerman, L. B. Getsov, 13 pp. FTD-TT-62-1798

No 6, 1962. 9668341 An Approximate Solution to a Two-Dimensional Stationary Heat-Conduction Problem and Its Use in the Determination of the Effect of Artificial Cooling of Turbine Components, by D. A. Pereverzev, 19 pp, (pp 24-31). FTD-TT-62-1738

Optimum Diffusor Shape, by I. Ye. Virozub, A. Sh. Dorfman, 13 pp, (pp 88-91).

Nomograms for the Approximate Calculation of Profile Flow in Turbine Grills, by G. Ya. Shmitser. 13 pp. (pp 92, 93).

G. Ya. Shmitser, 13 pp, (pp 92, 93).

Vol IX, No 7, 1962, pp 81-83. 9202279

The liffect of Channel Geometry on the

AUC-Tr-5538

Critical Heat Loads in the Forced Flow of Water, by B. A. Zenkevich, O. V. Remizov, 6 pp.

*NASA TT F-78

No 9, 1962, pp 14-17. Hydraulic Design of Air Cooling Systems for Multistage Gas Turbines With the AID of Electric Analog, by I. T. Shvets.

*FTU-TT-63-407

No 11, 1962, pp 23-27. Calculation of Pressure-Head Characteristics of Axial Screw-Type Runners, by V. I. Dumov.

FTD-TT-62-1230

Testing of Floated Gyroscopes, by G. A. Slomyanskiy, 47 pp.
RUSSIAN, per, Trudy Aviats Tekh Inst, Voprosy Tekh Priborostroyeniya, No 40, 1959, pp 21-54, 9668356

Certain Problems in the Dynamics of a System of Solid Bodies, by A. I. Lur'ye, 22 pp. RUSSIAN, per, Trudy Leningrad Politekhn Inst No 210, 1960, pp 7-22, 9680005

FTD-TT-62-1152

Comparative Investigation of Brosion Resistance of High-Teaperature Corrosion-Resistant Materials of Gas Turbines Operating of Solid Fuel, by K. V. Olesevich, 11 pp.
RUSSIAN, per, Trudy Seminara po Zharostoykim Materialam, Iz Ak Nau's Ukrainskoy SSR, No 4, 1959, pp. 108-115. 9508337

FTD-TT-62-1252

Experimental Investigation of Two One-Stage Compressors in a Wide Range of Reynolds Numbers, by S. A. Dovzhik, 26 pp.
RUSSIAN, per, Tsentral Aero-Gidrod Inst imeni Zhukovskogo, Prom Aero Osvyye Dozvukovyye Kom Statsionarnogo Tipa, No 20, 1961, pp 57-73, 9668192

FTD-T1-62-1750

Calculating Turbines With Variable Cas Parameters on the Radius, by N. A. Kolokol'tsev, 13 pp. RUSSIAN, per, Tsentral Aero-Gidrodinamiches Instimoni Zukovskogo, Prom Aerodinamika Osovyye Dozvukovyyo Kompressory Statsionarnogo Tipa, No 20, 1961, pp 74-81. 9668192

FTD-TT-62-1750

liquations of the Precessional Theory of Gyroscopes, by L. I. Kuznetsov, 5 pp.
RUSSIAN, per, Ucheyye Zapiski Leningrad Univ,
Seriya Matemat Nauk, Vol XXXV, No 280, 1960,
pp 25-30.

AIAA Vol I, No 1, 1963

Efficient Chain Link Shape, by V. F. Ugolinkov. RUSSIAN, per, Ugol' Ukrainy, Vol V, No 8, 1961, pp 27, 28.

NLL N 5014

Determination of the Profile of Least Resistance for a Ring Wing. RUSSIAN, per, <u>Vest Moskov Univ</u>, Ser I Matemat Mekh, No 1, 1961, pp 62-65.

#FTD-TT-63-397

Shock-Wave Interaction with a Moving Barrier Within an Elastic-Plastic, by G. M. Lyakhov, N. I. Polyakova.
RUSSIAN, per, Zhur Prik Mekh i Tekh Fiz, No 5, 1962, pp 89-95.

*FTD-TT-63-360

A Method of Thermomagnetic Pulse Modulation and a Device for Its Realization, by A. S. Dadunashvili, 5 pp. RUSSIAN, Patent No 130,071 (629645/26), 1 Jun 1959, 1 p. 9668249

FTD-TT-62-1805

A Wind-Tunnel Balance, by V. I. Zimenkov. RUSSIAN, Patent No 135271 (Appl No 666600/26), 16 May 1960, 2 pp.

*FTU-TT-63-38J

A Five-Component Wind-Tunnel Balance, by A. P. Biryulin, Ye. T. Karulin. RUSSIAN, Patent No 135345 (Aprl No 649975/27), 5 Jan 1960, 3 pp.

*FTU-TT-63-379

A System for Balancing and Determining the Trim of Float-Type Gyroscopes, by Yu. I. Paramonov, 5 pp.
RUSSIAN, Patent No 147,831 (744457/26-10), 12 Sep 1961, 1 p. 9680275

FTD-TT-62-1880

Process for Manufacture of a Seamless Rubber Stocking With Rubber Woof and With Heel Knitted Directly on Circular Knitting Machines, 5 pp. BELGIAN, Patent No 554,435.

Patent Office

New Method for the Complex Development of the Machinability of Steel Casting, by S. V. Lominskiy, BELORUSSIAN, per, Dok Ak Nauk BSSR, Vol VI, No 6, 1962, pp 366-369.

*FTD-TT-63-352

Types of Engine Gasolines and Their Chemical Changes During Storage, by Momeilovic. CROATIAN, per, Vojnotehnicki Glasnik, No 4, 1962, pp 274-283.

*ACSI I-2449 ID 2229449

Possibilities of Dewatering Mechanically the Finest Coal Slurry, by M. Bolek. CZBCH, per, Paliva, Vol XLI, No 1, 1961, pp 3-7.

GB/114/0544

Proparing Porcelain Mass and Glazure for Lower Sintering Temperatures, by Rudolf Reinert, 7 pp. CZECH, per, Sklar a Keramik, No 4, 1962, pp 123, 129, 9680515

FTD-TT-62-1667

Jointing of Metal Armatures With Porcelain Sleeves, by Jaromir Mracek, 8 pp. CZECH, per, Sklar a Keramik, No 4, 1962, pp 135-137. 9680515

FTD-TT-62-1667

The Automation of Rolling Mills; Present and Future Outlook, by R. Geoffrey. FRENCH, per, Technique Moderne, Vol LIV, Dec 1962, pp 57-59.

*3ISI 3214

Pheumatically Operated Telescopic Mast, 8 pp. FRENCH, Patent No 466,824.

Patent Office

Improvements in Buckles or the Like for Instant Safe Fastening Together of at Least Two Elements, Particularly for Parachute Belts or Other Parachute Fastening Elements, 5 pp. FRENCI, Patent No 701,479.

Patent Office

Winder With Automatic Thread Cutter, 13 pp. FRENCH, Patent No 952,571.

Patent Office

Drying of Pulp Webs Such as Paper or the Like Pulp Webs, 10 pp. FRENCH, Patent No 1,198,432.

Patent Office

The Amplitude Variations in a Watch, Timepieco, by P. Bercot, P. Altenburger.
GERMAN, rpt, Berichtsbuch des VI Congres
International de Chronometrie, II: 19-23 June 1959,
Munich, pp 799-813.

*AEC

A New Method for the Determination of the Regions of Maximum Tensile Stress Concentration in Structural Parts, by P. Bettzieche, H. Hengstenberg. GERMAN, per, Archiv fuer Eisenhuttenwesen, Vol XXXIII, 1962, pp. 775-731.

*BISI 3232

Flow Probes - Part I, Total Pressure Probes, by W. Wuest, 5 pp.
GERMAN, per, Archiv fuer Technisches Messes, Vol CXVI-CXIX, No 299, 1960, pp 245-248. 9202881

ACSIL Tr 1456

Development of the BBC-Krupp High-Tomperature Reactor, by Rudolf Schulten, Andreas Setzwein, et al. GERMAN, per, <u>Elektrotechnische Zeitschieft</u>, No 3, 1961, pp 55-56. 9203640

AEC-Tr-5472

On the Practical Vibration and Strength Experiments With Railroad Vehicles, by E. Sperling, E. Betzhold. GERMAN, per, Glasers Annalen, Vol LXXXII, 1958, pp 266-275.

AEC-SCL-T-445

A 200-Kilowatt Electron-Beam Multichamber Furnace, by M. Von Ardenne, G. Jaeger, et al, 6 pp. GERMAN, per, Neue Muette, Vol VIII, No 1, 1963, pp 2-4.

JPRS 18137

A Measuring Instrument for Explosion Vibrations, by it. Baule. GERMAN, per, Nobel Mefte, 1961, pp 67-71.

TIL T5280

Drawing Device for Drawing Blocks, by Franz Leiner, 9 pp. GERMAN, Patent No 520,502.

Patent Office

Protective Arrangement for Three-Phase Power Distribution Systems Provided With Ground Fault Neutralizers Which are Equipped With Ground Power Relays Responsive to Ground Fault Voltage, 12 pp.
GERMAN, Patent No 624,091.

Patent Office

Arrangement for Metallizing Continuous Bands by Deposition of Metallic Vapor in Vacuo, 5 pp. GIRMAN, Patent No 747,257.

Patent Office

Band Saw Tablo, by Josef Kramer, 5 pp. GERMAN, Patent No 826,640.

Patent Office

Procedure for Producing Alumina of High Electric Insulating Capacity, by Millner Tivader, Fukker Karoly, et al.
HUNGARIAN, Patent No 148,074, 31 Mar 1961.

*FTI)-TT-63-398

Effect of Rotary Inertia and of Sheer Forces on Free Vibrations of Rotating Bars, by Jerzy Lipka, 14 pp.
POLISH, per, Archiwum Budowy Maszyn, Vol VII, No 3, 1960, pp 283-294. 9679897

FTD-TT-62-1477

Control of Secondary Air Jets in Combustion Chambers of Gas Turbines, by Tadeusz Haupt, 12 pp. POLISH, per, Energetyka, No 7, 1962, pp 215-218. 9668354

FTD-TT-62-1786

One Dimensional Adiabatic Two Phase Flow, by J. Smigielski.
POLISH, per, Polska Ak Nauk Instytut Maszyn Przeywowch Prace, No 10, 1962, pp 3-20.

*FTD-TT-63-378

Studying Maximum Load for Ribbed Cylindrical Shells Subjected to Simultaneous Effect of Axial Forces and Internal Pressure, by I. Ya. Amiro, 10 pp.

UKRAINIAN, per, Prykladna Mekhanika, Vol VII, No 5, 1961, pp 496-502. 9679876

FTD-TT-62-1625

Fuels & Propulsion

Approximate Method for Calculating Axisymmetrical Supersonic Isentropic Gas Flows With Little Divergence of the Flow, by V. G. Dulov, 10 pp. RUSSIAN, per, Iz Vyssh Ucheb Zaved Ser Aviats Tekh, No 2, 1962, pp. 8-14. 9680139

FTD-TT-62-1802

Influence of Ash-Forming Components in Liquid Fuel on Deterioration of Cas-Turbine Materials, by R. F. Mocharnyuk, 20 pm.
RUSSIAN, per, Trudy Seminara po Zharostoykim Materialam, 1z Ak Nauk Ukraniskoy SSR, Riev, No 4, 1959, pp 96-197, 9668337

FTD-TT-62-1252

Non-Static Operation of Rocket Engines With Fluid Fuel, by R. Staniszewski. POLISH, per, Wojskowy Przeglad Lotniczy, No 8, 1962, pp 48-56.

*FTD-TT-63-357

Some Results Concerning the Distribution of Drops of Fuel Atomized Through Low-Pressure Injectors, by Cornel Ungureanu, 13 pp.
RUBANIAN, per, Energetica, Vol IV, No 3, 1961, pp. 94-100. 9668326

FTD-TT-63-29

Processing of Fuels by the Dry Method, by M. Bourgoois, G. Manevy.
UNKGOWN, rpt, CEA No. 256, Mar 1962.

*AEC

Scientific Materials & Metallurgy

Rolling of Strip From Aluminum Powders, by A. I. Murzov, S. I. Monofilov, et al. RUSSIAN, bk, 1961, pp 50-58.

HB 5848

Hydrocarbon Geochemistry and Deposits. RUSSIAN, rpt, Moscow, 1962.

MEB

Solid State Diffusion in Metals and Alloys, by S. D. Gertsriken, I. Ya. Dekhtyar, 564 pp. RUSSIAN, bk, Diffuziya v Metallakh i Splavakh v Tverdoy Faze, Moscow, 1960.

*AEC

Hot Mechanical Working of High-Speed Steels, by Yu. A. Geller. RUSSIAN, bk, Instrumental nye Stali, Metallurgizdat, 1955, pp. 322-332.

*BISI 3165

High Temperature Oxidation of Dispersed Aluminum, by V. L. Korneyev, I. I. Vernidub, 11 pp. RUSSIAN, bk, Issledovaniya po Zharoprochnym Splavam, Iz Ak Nauk SSSR, Moscow, Vol VII, 1961, pp 309-316, 9668235

FTD-TT-62-1833

Corrosion of Magnesium, by V. V. Romanov, 47 pp. RUSSIAN, bk, Korroziya Magniya, 1961, pp. 3-66.

ACSI I-8207 ID 2224746

Stainless Scale-Resistant Acid-Resistant and Heat-Resistant Steels and Alloys, by Yu. P. Davydov, G. V. Pokrovskiy.
RUSSIAN, bk, Listovaya Shtarbovka Legirovannykh

Staley i Splavov Oboronngiz, Moscow, 1962, pp 58-72.

*FTD-TT-63-353

Soviet Research in Hard Alloys, 42 pp.
RUSSIAN, bk. Spravochnik no Machinostroitel nym i
Ihk Splavy, Vol II, Moscow, 1959, pp 533-551,
559-561, 565-570.

JPRS 18637

Certain Problems of the Physics of Cutting Heat Resistant Alloys, by A. N. Daniyelyan, P. I. Bobrik, 18 pp. PUSSIAN, bk, Trudy Bosk Aviats Tekh Inst Issled v Oblasti Pekh Otrabetki Petallov, No 53, Moscow, 1962, pp 8-22, 9668330

FTD-TT-62-1871

Extruded Perlite, Fiberglass, and Products Based on It.
RUSSIAN, brochure, Vspuchenyy Perlit i Izdeliya
Rayego Osnove Vauchno-Issledovatelskiy Institut
Stroymaterialev i Izdeliy Akaderiya Stroitel'stva
i Arkhitektury USSR, Kiev, 1961, pp 1-10.

*FTD-TT-63-354

Scientific Naterials & Metallurgy (Contd)

Atomnoi Energii, 1961, 8 pp.

Powder-Plate Electrode for Electroslag Facing, by A. Ya. Shvartser, I. Ya. Golub, 6 pp. RUSSIAN, per, Avtomat Svarka, No 11, 1962, pp 71-76. JPRS 18465 Testing of Steel Wire Ropes With Electro-Magnetic Devices, by V. D. Belyi, M. B. Treiger. RUSSIAN, per, Bezopasnost' Truda v Pronyshlennosti, Vol V, No 5, 1961, pp 22-24. NLL M 5002 Some Aspects of the Hydrostatic Pressing of Powders, by M. Yu. Bal'shin, A. P. Dubrovskiy, 5 pp. RUSSIAN, per, Dok Ak Mauk SSSR, Vol CXXXVI, No 2, 11 Jan 1961, pp 332-335. JPRS 18407 The liffect of the Microrelief on the Pattern of Spreading Liquid Metal on a Hard Metal Surface, by Yu. V. Goryuntef, V. Persov, et al. RUSSIAN, per, Dok Ak Mauk SSSR, Vol CXLVI, No 8, 1962, FTD-TT-63-384 pp 638-641. The Cr-Ni-Nb Phase Diagram, by V. M. Svechikov. V. M. Pan. RUSSIAN, per, Dopovidi Ak Nauk Ukrains'koyi RSR, No 10, 1961, pp 1290-1295. NLL H 3999 The Fine Crystalline Structure of a Complex Cast Nickel-Base Alloy, by M. P. Brown. RUSSIAN, per, Piz Met Metallov, Vol XIII, No 4, 1962, pp 626-631. NLL M 3998 Mechanical Working by Cutting of Metal Powder Antifriction Materials, by A. Ya. Artamonov, 18 pp. RUSSIAN, per, Geokhimicheskiy Sbornik, No 7, 1961, pp 63-74. 9680346 FTD-TT-62-1472 Flame Propagation Along the Contact Surface of Metals With Solid Oxidizing Agents, by D. P. Polikarpov, N. N. Bakhman, 12 pp. RUSSIAN, per, Inzhenemo-Fiz Zhur, Vol V, No 7, 1962, pp 11-17, 9680152 FTD-TT-62-1570 Artificial Sun- Gas-Electric Method of Metal Cutting, 8 pp. RUSSIAN, np, Izvestiya, 9 Dec 1962, p 6. JPRS 18616 Determination of the Sign of a Local Magnetic Field in the Nuclei of Gold Dissolved in Iron and Nickel, by B. N. Samoilov, V. V. Sklyarevskiy, et al. RUSSIAN, per, Iz Ak Naux SSSR, Ordena Lenina Institut

AEC-Tr-5476

Scientific Materials & Metallurgy (Contd)

Isothermal Sintering of Metallic Powders Under Pressure, by M. Yu. Bal'shin, A. A. Trofimova, 15 pp.
RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Tekh Nauk, Metal i Toplivo, No 6, 1961, pp 45-51.

JPRS 18245

Phase Diagrams and Certain Properties of Alloys of the Niobium-Molybdenum-Tungsten System, by E. M. Savitskiy, V. V. Baron, et al. RUSSIAN, per, Iz Ak Nauk SSR, Otdel Tekh Nauk, Metall i Toplivo, No 2, 1962, pp 119-125.

AEC-Tr-5576

Selected Articles From the Russian Periodical Iz Vysshikh Ucheb Zaved, Chern Met.

No 7, 1960, pp 146-155. The Dependence of the Recrystallization Temperature of Chrome-Base Binary Alloys on the Alloying Process, by S. S. Gorelik, N. N. Muller.

Army Materiel Command Tr Log No 104

No 11, 1961, pp 60-70. Nature of External Cracks on Continuous-Cast Steel Sections, by E. A. Iodko.

HB 5472

No 2, 1962, pp 51-55. Formation and Behavior of Continuously Cast Steel Sections in the Mold, by L. S. Rudoi.

HB 5567

No 3, 1962, pp 55-59. Study of the Kinetics of the Solidification Process in the Axial Zone of Steel Ingots by the Differential Sounding-Rod Method, by S. Ya. Skoblo. HB 5852

No 5, 1962, pp 44-50. The Influence of Barium Oxide on the Viscosity of Blast Furnace Slags, by L. I. Bol'shakov, N. L. Zhilo.

9131 3188

No 7, 1962.

Sulphur Segregation in Large Rimmed-Steel Ingots, by B. I. Zayakin, (pp 62-70).

*HP 5884

Effect of Remelting of Steel Contaminated by Titanium Mitrides, by Yu. G. Gurevich, (pp 71-77).

FIR 5885

Effect of Mitrogen and Boron on Properties of Austenitic Stainless Steel, by A. A. Yaskevich, A. M. Samarin, (pp 97-102).

*13 5831

Scientific Materials & Metallurgy (Contd)

Selected Articles From the Russian Periodical Iz Vyyshikh Ucheb Zaved, Chern Met. (Contd)

12 vyyshikh oches zaved, cheffi .st. (Contd)	
No 8, 1962, pp 21-28. Intensified Blast Furnace Hearth Processes, by V. I. Loginov.	*IID 5873
No 9, 1962, pp 54-65. Flow of Slag in Blast Furnace Through Coke Packings Counter Current to Gas, by S. V. Shavrin, I. N. Zakharov.	HB 5795
No 10, 1962, pp 111-118. Effect of Cold Treatment of Tool Steels Upon Their Mechanical Properties, by Yu. G. Vyshkovskiy.	HB 5780
No 11, 1962, pp 57-60. Thermodynamic Conditions for the Formation of Aluminum Nitride in Liquid Iron, by V. F. Isayev, A. N. Morozov.	UB 5828
No 12, 1962. Hanging of Melt in Blast-Furnace Stock Column, by A. S. Kukarkin, B. I. Kitayev, (pp 20-28).	*IIB 5882
Study of Gas Flow in Blast Furnace by the Use of Helium Instead of Radioisotopes, by I. A. Kopyrin, (pp 29-40).	*(18 5879
Use of Variable Polarity Current in the Electrolytic Production of Rhenium Powder, by S. I. Sklyaronko, I. I. Lavrov, et al, 8 pp. RUSSIAN, per, Iz Vysshikh Ucheb Zaved Tsvetnaya Metal, No 1, 1961, pp 111-114.	JPRS 17937
Metting and Impregnation of Briquettes of Titanium and Zirconium Nitrides by Molten Cobalt and Nickel, by L. V. Beylina, I. P. Kislynkov, 7 pp. RUSSIAM, per, Iz Vysshikh Ucheb Zaved, Tsvetnaya Metal, No 3, 1962, pp 129-134.	JPRS 18407
The First Inter-College All-Union Scientific Conference on Powder Metallurgy, by N. Z. Pozdnyak, 10 pp. RUSSIAN, per, Iz Vyssh Ucheb Zaved, Tsvetnaya	
Metal, No 3, 1962, pp 164-167, 9668201	FTD-TT-62-1837
Some Problem Connected With Coking of Coal Pitch, by Y. L. Tichombrov. RUSSIAM, per, Koks i Khimiya, No 10, 1957, pp 25-30.	INSDOC/Ref: T. 4918

Scientific Materials & Motallurgy (Contd)

Growing of Crystals and an Investigation of the Kinetics of Their Formation, by L. M. Belyarev, A. A. Chernov, 18 pp.
RUSSIAN, per, Kristallografiya, Vol VII, No 5, 1962, pp 659-663.

JPPS 18257

Forging Molybdenum and Alloys on Its Base, by T. V. Vorontsova, N. M. Morgunova, 11 pp. RUSSIAN, per, <u>Kuznechno-Shtampovochnoye Proiz</u>, No 8, 1962, pp. 8-11. 9668358

FTP-TT-62-1789

Oxidation and Decarburisation of Steel in Air Furnaces With Partial Burning of Natural Gas, by V. 1. Kostyakov, A. E. Erinov. RUSSIAN, per, <u>Kuznechno-Shtampovochnoye Proiz</u>, Jan 1963, pp 29-32.

*DISI 3229

Equipment for Determining the Kinetics of Vaporization and the Vapor Tension of Metal Powders, by I. M. Fedorchenko, Yu. B. Ermolovich, 5 pp. RUSSIAN, per, Metallokeram Materialy i Metody ikh Issled - Informat Materialy, 1959, pp. 13-16.

JPRS 17887

Selected Articles From the Russian Periodical Metal i Term Obra Met.

No 2, 1961, pp 2-11, 9668360 Structural State and Heat Resistance of Alloys, by I. L. Mirkin, V. Z. Tseytlin, 16 pp.

FTD-TT-62-1756

No 6, 1962.

Carbon in Hagnetically Soft Iron-Aluminum Alloys, by B. V. Molotilov, 10 pp., (pp 2-5). 9068234

FTD-TT-65-2

The Effect of Mhenium on the Properties of a Cobalt-Chromium-Nickel-Alloy, by Ye. M. Savitskiy, V. A. Solt's, 8 pp. (pp 10-13). 9668247

FTD-TT-62-1840

Deterioration of the Magnetic Properties of Magnico Alloys in Dull Fracture, by Ya. M. Dovgalevskiy, Ye. G. Povolotskiy, 8 pp, (pp 14-17). 9668234

FTD-TT-63-2

No 7, 1962, pp 45-45. A Heat-Resisting Ferrous Cast Vacuum-Melted Alloy, by I. G. Ivantsov. GLL 21 5992

No 9, 1962, pp 20-22. The Connection Between the Solubility of Carbon in Ferrite and a Variety of Carbides Produced During Annealing, by L. S. Livshits. *FTD-TT-63-349

Scientific Natural (Contd)

Selected Articles From the Russian Periodical Poroshkovaya Metallurgia.

No 4, 1961. 9667236 Investigation of the Properties of Powdered Metal Iron-Brass Compositions, by O. K. Teodorovich, I. D. Radonysel'skiy, 11 pp, (p 63).

Investigation of the Short-Period Strength of Heat-Resistant Cermet Materials, by V. N. Rudenko, 13 pp, (pp 86-93).

On Thermal Fatigue of Metal-Ceramic Materials, by G. N. Tret'yachenko, L. V. Kravchuk, et al, 6 pp, (pp 94-97).

Purification of Molten Sodium by Cermet Filters, by

I. M. Fedorchenko, N. A. Filatova, et al, 7 pp, (pp 98-102).

No 3, 1962, pp 80-85. Production of High Porosity Sintered Parts in the Accumulator Industry, by Y. M. Pozin.

Life of Drills Extended by Chemical Nickel Plating, by P. T. Basko.
RUSSIAN, per, Stanki i Instrument, No 1, 1963, p 43.

Certain Problems on the Welding of Metal Powdors, by L. A. Mel'nikov, 8 pp. RUSSIAN, per, <u>Svarochnoye Proizvodstvo</u>, No 11, 1962, pp. 13-15.

The Inertial Method of Weft Insertion, by N. I. Makachev. RUSSIAN, per, <u>Tekstil Prom</u>, Vol XXI, No 11, 1961, pp 58-60.

Properties of Filiforn Crystals, by H. M. Nadgornyy. RUSSIAN, per, Uspekhi Fizicheskikh Nauk, Vol LXXVII, No 2, Jul 1962, pp 201-227.

Pressing of Metal Powders, by S. Ya. Plotkin, G. V. Samsonov, 7 pp. RUSSIAN, per, <u>Vest Mash</u>, No 5, 1959, pp 53-56.

Unitiple Re-Use of Chemical Nickel Plating Baths, by B. Sh. Shteinberg, N. A. Bogakovskiy. RUSSIAN, per, Vest Hash, Vol XLII, No 12, 1962, pp 65, 66. FTD-TT-62-1473

NLL M 5015

HB 5855

JPRS 18465

NLL RTS 2121

*ACSI I-2339 ID 2229414

JPRS 18407

H2 5887

Scientific Materials & Metallurgy (Contd)

Solid State Transformations in Chromium and Its Alloys, by A. T. Grigor'yev, E. M. Sokolovskaya. RUSSIAN, per, Vest Mosk Univ Ser Khim, Vol XVI, No 6, 1961, pp 3-15.

DSIR RTS 2171

Spectrographic Analysis of Pure Iron, by E. V. Lifshits, L. N. Mosova. RUSSIAN, per, Zavod Lab, Vol XXVIII, No 11, 1962, p 1329.

HB 5866

Spectrographic Analysis of Iron Ore, Sinter, and Blast-Furnace Slag in a Resonant D. C. Arc, by M. N. Shtutman, et al.
RUSSIAN, per, Zavod Lab, Vol XXVIII, No 11, 1962, pp 1330-1332.

IIB 5787

Electrophotographic Method of Recording Spectra, by S. G. Grenishin, Yu. A. Cherkasov. RUSSIAN, per, Zavod Lab, Vol XXIX, No 3, 1963, pp 175-177.

HB 5888

Pyrophoric Metals, by D. A. Pospekhov. RUSSIAN, per, Zhur Prik Khim, Vol XXII, No 1, 1949, pp 5-12.

Army Materiel Command Tr Log No 103

Ways of Extending the Service Life of Nickel-Zinc Accumulators, by V. V. Romanov. RUSSIAN, per, Zhur Prik Khim, Vol XXXV, No 6, 1962, pp 1295-1302.

NLL M 3996

Corrosion Study XVI - Effect of Rate of Penetration of Water Vapor by Oil Film in Corrosion of Steel Protected by Oil Layers, by Robert Bartonicek. CZECH, per, Chemicke Listy, Vol LII, 1958, pp 190-195.

*ACSI I-2392-A ID 2229434

Corrosion Study XVII - Effect of Hydrogen Sulfide on Corrosion of Aluminum, by Korel Smrcek, Ivan Sekerka, et al. CZECH, per, Chemicke Listy, Vol LII, 1958, pp 196-200. Internal Cracks in Steel Forgings- Part I, by V. Koselev, S. Burda.

*ACSI I-2392-B ID 2229434

Ultrasonic Inspection as a Criterion of the Service Performance of Large Steel Forgings, by V. Koblovsky. CZECH, per, Hutnicke Listy, Vol XVI, No 3, 1961, pp 174-185.

CZECH, per, <u>Hutnik</u>, Vol XII, No 4, 1962, pp 180-184.

HB 5699

Vacuum Melting in Consumable-Electrode Arc Furnaces on Laboratory Scale. Part I, by Z. Eminger,

Z. Kleteka. CZECH, per, <u>Hutnicke Listy</u>, Vol XVII, No 9, 1962,

pp 617-626.

HB 5433

HB 5698

Scientific Materials & Motallurgy (Contd)

Corimetry in Nitric Medium. Application to the Determination of Iron, Uranium and Plutonium, by J. Corpol, F. Regnaud.

DUTCH, per, Anales Chimie Acta, Vol XVII, 1962, pp 36-39, 9205015.

AEC-HN-Tr-45

Stress Phenomena in Glass-Glass and Glass-Metal Joints, by A. J. Kruithof, 12 pp. DUTCH, per, Nederlands Tijdschift Matnurkunde, Vol XXIV, 1958, pp 301-314, 9202878

ACSIL Tr 1319

The TNO Fiber Institute in 1962. DUTCH, per, T.N.O. Niouws, No 204, Feb 1963, pp 95, 96.

*ACSI I=2511 ID 2232453

Thermodynamic Properties of Zirconium and Its Alloys With Tin, by G. B. Federov, E. A. Smirnov. FRENCH, rpt, Paper No SM-26/57 Presented at the Symposium on Thermodynamics of Nuclear Materials, Vienna, May 21-25, 1962. 9203642

AEC Tr-5551

Accelerating Melting the Use of Matural-Gas-Oxygen Burners to Supplement the Heating of a 10-16.5 Ton Electric Furnace, by R. Pessain. FREMCH, per, Centre Documentation Siderurgique Circulaire, Vol XVIII, No 9, 1961, pp 2033-2038.

*BISI 3216

Rapid Determination of Total Carbon in Steels and Cast Iron, by L. Blom, J. A. Stijntjes. FRENCH, per, Chinic Analytique, Vol XLIV, Jul 1962, pp 302-308.

*BISI 3227

Influence of Chromium Ions on the Intergranular Corrosion of Austenitic Stainless Steels in Nitric Acid Medium, by H. Coriou, L. Crall, et al. FRENCH, per, Colloque de Metallurgy, Vol IV, 1961, pp 75-84, 9204975

AEC-Tr-5644

Influence of Silicon Additions on the Corrosion of Chromium-Nickel Austenitic Steels in Mitric Medium Containing Mexavalent Chromium, by H. Coriou, A. Desestret, et al. FRENCH, per, Corntes Rendus, Vol CCLIV, 25 Jun 1962, pp. 4467-4469. 9204976

AEC-Tr-5646

Vaproisation of Uranium in Vacuo, by W. J. Deiss. FRENCH, per, Comptes Rendus, Vol CCLVI, No 3, 1963, pp 671-673.

*ADRE Harwell

Scientific Saterials & Metallurgy (Contd)

Electrochemical Aspect of the Corrosion of Austenitic Stainless Steel in Nitric Medium and in the Presence of Hexavalent Chromium, by H. Coriou, J. Hure, et al. FRENCH, per, Electrochimica Acta, Vol V, 1961, pp. 105-111. 9205011

AEC-Tr-5657

Influence of Boron and Tellurium on Cast Iron, by A. Roos. FRENCH, per, Fonderie, Paper Presented to the 35th Annual Congress of the Association Technique de Fonderie, Oct 1962.

*BISI 3174

The Coherent and Incoherent Grain Boundaries in the Twins of Cubic Petals, by D. Whitwhar, P. Lacoube.
FRENCH, per, Fourth Metallurgy Colloquium, pp 161-182. 9203639

AEC-Tr-5460

Barometric Investment Casting of Uranium, by H. Ollier. FRENCH, per, Revue de Metallurgie, No 59, Jun 1962, pp 547-551. 9205009

ABC-HF-Tr-47

The Influence of Additional Elements on the Magnetic Properties of Forged Steels, by M. Toitot, C. Roques. FRENCH, per, Revue de Metallurgie, Mo 59, Jul-Aug 1962, pp 631-637.

BIST 3107

An Automated System for Cutting off Billets Using a Computer, by Ph. Juget. FRENCH, per, <u>Technique Moderne</u>, Vol LIV, Dec 1962.

*BISI 3215

Coulometric Titration Apparatus for the Determination of Carbon and Sulphur in Metals in the Combustion Method, by E. Biichel.
GERMAN, bk, International Yearbook of Chemical Industries 1962/1963.

*BISI 3220

Determination of the Optical Constants of Hetals, by P. Drude. GERMAN, per, Annalen der Physik und Chemie, Neue Folce, Vol XXXIX, No 4, 1890, pp 480-554, 9203411

AEC-SCL-Tr-448

Scientific Materials & Metallurgy (Contd)

Selected Articles From the German Periodical Archiv Bisenhuttenwesen.

Archiv Eisenhuttenwesen.	
Vol XXXII, No 5, 1961, pp 292-296. Vaporization and Refining - Part II-B, by L. von Bogdandy.	113 5748
Vol XXXIII, 1962. Zone Melting Experiments With Iron Alloys and Commercial Steels, by W. A. Fischer, R. Uberoi, (pp 661-678).	11B 5763
The Segregation Effect of Chromium in the Iron Nickel-Sulphur Systems, by R. Vogel, (pp 723-727).	*BISI 3223
Vol XXXIV, 1963. Equilibria Between Iron-Phosphorus-Melts and Lime Free Phosphorus Bearing Slags, by G. Tromel, K. Schwerdtfeger, (pp 101-108).	*BISI 3221
The Problem of Lattice Distortions During the Cold Deformation of Netals, by F. Mever, H. Botigher, (pp 147-149).	*BISI 3222
Cold Bolling of Profiles, by E. Bergfelder. GERMAN, per, Bander, Bleche, Rohre, Feb 1961, pp 64-67.	*BISI 3206
Non-Destructive Testing of Tubes and Bars in Alternating Hagnetic Fields, by R. Crome. GERMAN, per, Bander, Bleche, Rohre, Jan 1963, pp 16-21.	*BISI 3225
Representation of Fiber Textures, by H. J. Bunge. GERMAN, rpt, Deutschen Akademie der Wissenschaften zu Berlin, Vol I, No 1, 1959.	AEC-Tr-5649
Representation of Fiber Textures, II, by H. J. Bunge. GERMAN, rpt, Deutschen Akademie der Wissenschaften zu Berlin, Vol I, No 7-10, 1959, pp 400-404.	AEC-Tr-5649
Chromic Phosphate and Other Phosphate Pigments as Modern Corrosion Inhibitors, by G. Meyer. GERMAN, per, Farbe und Lack, Vol XLVIII, No 5, 1962, pp 315-321.	8151 3123
High-Vacuum Melting With the Dresden Electron Beam Multiple Chamber Furnace, by M. von Ardenne. GERMAN, per, Freiberger Forschungshefte, No B68, 1962, pp 5-18.	*31SI 3192

Scientific Materials & Metallurgy (Contd)

Several Results Obtained in Melting in the Dresden Electron Beam Multiple Chamber Furnace, by M. Foerster. GERMAN, per, Freiberger Forschungshefte, No B68, *BISI 3193 1962, pp 19-26. Heat Exchange Buring the Melting of Cast Iron in the Cupola, by B. Marincek. GERMAN, per, Giesserei, Vol XLIX, No 13, 1962, pp 377, 378. HB 5686 Mothods of Hardness Testing of Induction Hardening Steels, by K. Kegel. GERMAN, per, Harterei-Technische Mitt, Part II, Vol XV, No 2, 1960, pp 96-101. *BISI 3230 The Status of High Temperature Sinter-Material Research, by Eberhard Meyer-Hartwig. GERMAN, per, Jahbuch 1955 der Missenschaftliche *ACSI I-2432 Gesellschaft fuer Luftfahrt, 1935, pp 332-341. ID 2229446 Reaction-Sinter Process and Suitable Sinter Materials for High-Temperature Technics, by Eberhard Meyer-Hartwig. GERMAN, per, Jahrbuch 1959 Wissenschaftliche Gesellschaft fuer Luftfahrt e.v., 1959, *ACSI 1-2433 10 2229447 pp 390-394. Application of the Dielectric Method for Investigating Plastics, by G. Langbein. GERMAN, per, Kunststoffe, Vol LI, No 9, 1961, *AEC pp 503-508. Investigations Comparing Magnetic Sorting of Steel With a 50 and a 5 c/sec, by F. Michalski, E. Kenenesy. GERMAN, per, Materialprufung, Vol IV, Dec 1962, pp 469-472. *BISI 3228 A New Corrosion Test for Small Electroplated Parts, by K. Lehr. GERMAN, per, Metalloberflache, Vol XVI, 1962, pp 245, 246. HB 5862 The Basic of Strength Calculations in the Design of Boilers, Pressure Vessels, and Pipelines, Taking Into Account Plastic Deformation of Metals, by E. Ulrich. GERMAN, per, 'litt ver Grosskesselbesitzer, Parts I-II, No 78, 1962, pp 190-198, No 79, 1962, pp 245-261. *BISI 3224

Scientific Materials & Hetallurgy (Contd)

Selected Articles From the German Periodical Noue Hutte.

Vol VII, No 8, 1962, pp 504, 505. Weld Deposit Metal Produced for Experimental Purposes by Electroslag Remelting, by V. Horn.	НВ 5876
Vol VII, No 12, 1962, pp 729-735. Effectiveness of Oils and Oil Emulsions in the Cold Rolling of Strip Steel, by H. Kraut.	*HB 5883
Vol VIII, 1963. A New Rapid Method of Sulphur Determination in Motals, by W. Fischer, H. Bastius, (pp 35-39).	*BISI 3204
Complexemetric Sulphur Determination Using the Evolution Process, by S. Spauszus, C. Schwarz, (pp 40-41).	*BISI 3205
The Prictional Pyrophoricity of Alloys, by II. Nowotny, O. Smetana. GERMAN, per, Osterreichische Chemiker-Zeitung, Vol LVIII, 1957, pp 195-208, 9203408	AEC-Tr+5544
New Aids for the Ultrasonic Testing of Welds, by V. Deutsch, H. J. Schinke. GERMAN, per, Schweissen und Schneiden, Vol XIV, No 3, 1962, pp 109-111.	HB 5603
Effect of Vacuum Melting Practice Upon Some Properties of Steel, by K. Bungardt. GERMAN, per, Schweizer Archiv, Dec 1962, pp 485-490.	*HB 5864
Selected Articles From the German Periodical Stabi und Eisen.	
Vol LI, Aug 1931, pp 1053, 1034. The Equilibria of Carbon and Oxygen in Molten Iron, by H. C. Vacher, E. H. Hamilton.	BISI 3049
Vol LXXXII, 1962. Influence of Chemical Composition and Pre-Treatment on the Straightening Force, the Change in Rod Diameter and the Bechanical Properties Then Roll Straightening Cold-Drawn Steel, by O. Pawelski, (pp. 1410-1422).	BISI 3062
Impressions Gained During a Visit to Some Blast- Furnace Plants in Japan, by G. Heynert, (pp 1720-1726).	HB 5794

Scientific Materials & Metallurgy (Contd)

Selected Articles From the German Periodical Stahl und Eisen. (Contd)

Vol LXXXII, 1962. Drawing Experiments on Steel Wires With High Contents of Carbon and With a Final Diameter of 5.7.mm., by H. Krautmacher, F. Greis, (pp 1801-1809).	*BIGI 3219
Vol LXXXIII, 1963. Mitrogen Solubility in Iron Alloys Within the Temperature Range of 700 to 1200°C, by M. Schenck, M. G. Frohberg, (pp 93-99).	*BISI 3217
On the Officiency of Air-Conditioning Plants in Cranes Cabs, by R. Simon, (pp 166-172).	*31SI 5213
Electronic Casting Pit Crane Weighing Devices and Their Operational Success During Slab Casting, by G. Wiethoff, W. Dorr, (pp 213-219).	*BISI 3209
Desulphurisation of Pig Iron With Powdered Lime Outside the Blast Furnace, by W. vor den Esche, M. Haucke, (pp 270-281).	*BISI 3210
Effect of the Test Apparatus on the Rate of Strain During the Tensile Test, by A. Krisch, R. Schweitzer, (pp 282-290).	*RTS1 3211
Characteristics of Tensile Testing Machines, and Their Effect on the Rate of Strain at the Lover Yield Point, by A. Krisch, R. Schweitzer, (pp 290-298).	*BISI 3212
On the Elimination of Eccentricity in the Manufacture of Scamless Precision Tubes, by A. Mueller. GERMAN, per, Technische Rundschau, Part II, Vol LIV, 1962, pp 13, 15.	*BISI 3226
Behaviour of Forsterite, Magnesite and Chrome-Magnesite Bricks Under Reducing Conditions and With Iron-Containing Slag, by G. Reinhardt. GERMAN, per, Tonindustriezeitung, Vol LXXXIII, No 19, 1959, pp 432-441.	*BISI 3231
The Magnetic Behaviour of Fe-Al Single Crystals, by II. Gengnagel. CERMAN, per, 2 fuer Angewondte Physik, Part I, Vol XIII, Nov 1961, pp 527-554.	BISI 3143
The Magnetic Behaviour of Fe-Al Single Crystals, by II. Gengnagel. CERMAN, per, Z fuer Angewandte Physik, Part II, Vol XIII, Dec 1961, pp 569-576.	BISI 3143

Scientific Materials & Meterials (Contd)

Comparative Investigation of Natural and Synthetic Emeralds, by E. Schiebold. GERNAN, per, Z fuer Kristallographie, Vol XCII, 1935, pp 435-473.

*AEC

On the Heat Treatment of Two-and Three-Component Alloys on the Basis of Magnesium Zirconium in Hydrogen, by Mans-Joachim Taschow, 9 pp. GERMAN, per, Z fuer Metallkunde, Vol LII, No 2, 1961, pp 135-141.

Dept of Interior TN7 E57 No 639

The Crystalline Structure of Manganese, by Arne Westgren, Gosta Phragmen.
GERMAN, per, Z fuer Physik, Vol XXXIII, 20 Jul 1925, pp 777-788.

*ACSI I-2505 ID 2232450

Electrochemical Determination of Deviations From Stoichiometry in Metal Oxides, by H. J. Engel. GERMAN, per, Z fuer Wlektrochem, Vol LX, 1956, pp 905-911.

AEC-UCEL-Tr-834(L)

Epoxi Resins Netted With Organic Metal Compounds, by Magyar Laura, 7 pp. HUNGARIAN, per, <u>Elektrotechnika</u>, No 2-3, 1962, pp 32-85.

ACSI I-1680 ID 2203214

Vapor Pressure of Metallic Yttrium, by An. N. Mesneyanov, Yu. A. Priselkov, et al. ITALIAN, rpt, Symposium on Thermodynamics of Nuclear Materials, Venice, 21-25 May 1962, 9 pp.

AEC Tr-5359

New Data on the Deformation Behavior of Niobium, Tantalum, Molybedenum and Tungsten at Low Temperatures, Parts I and II, by F. Ostermann. ITALIAN, per, Metall, Vol XVI, No 7, 1962, pp 656-661, 879-884.

*AEC

Selected Articles From the Japanese Periodical Tetsu_to_Hagane.

Vol XLVII, No 10, 1961, pp 1362, 1363. Analysis of Metal Yield From a Basic Oxygen [LD] Furnace, by T. Itaoka, K. Mizui, et al.

HB 5629

Vol XLVIII, No 8, 1962, pp 933-940. On the Honogeneity of Composition and Structure of Continuous Cast Billet Materials. Report VIII, by Y. Aketa, K. Ushijima. HB 5670

Scientific Materials & Metallurgy (Contd)

Selected Articles From the Japanese Periodical Tetsu to Hagane. (Contd)

Vol XLVIII, No 11, 1962. On the Rate of Fluid-Red Reduction of Iron Ores, by A. Okura, Y. Matsushita, (pp 1237, 1238).	HB 5865
On the Deoxidation Process in the Melting of Stainless Steel, by T. Kakutani, T. Matsukura, et al, (pp 1273, 1274).	UB 5867
Removal of Arsonic From Liquid Iron by Vacuum Melting, by T. Tottori, M. Ejima, (pp 1294, 1295).	IIB 5842
Production of API Oil-Well Casing Grade J-55 Steel by the Basic Oxygen (LD) Process, by T. Itaoka, et al, (pp 1366-1368).	HB 5851
Production of Constructional Carbon Steel MC- Type by the Basic Oxygen (LD) Process, by T. Itaoka, R. Fujii, et al, (pp 1368-1371).	HB 5850
Addition of Rare Earth-Calcium-Silicon Alloys to 18% Cr and Cr-Mm Stainless Steels, by M. Hasegawa, et al, (pp 1485-1487).	HB 5874
Hffect of Ausforming on Impace Toughness and Creep Rupture Strength of 13% Cr Steel, by Y. Hosoi, (pp. 1487, 1488).	ЧЗ 5875
Behavior of Sigma Phase in 25% Ni, 20% Cr Stainless Steel, by K. Takahashi, T. Onishi, et al, (pp. 1486-1490).	HB 5873

Scientific Mathematics & Data Processing

Methods of the Theory of Whole Functions in Radiophysics, Communications Theory, and Optics, by Ya. I. Khurgin, V. P. Yakovlev. (NY-7591) RUSSIAN, bk, Methods of the Theory of Whole Functions in Radiophysics, Communications Theory, and Optics, Moscow, 1962, 220 pp.

*JPRS

Stability of Non-Linear Control Systems, by A. M. Letov. RUSSIAN, bk, <u>Ustoychivost, Nelineynykh Reguliruyemykh Sistem</u>, 2nd Edition, 1962, 483 pp.

*FTD-TT-63-399

Algorithm for Solving a Transport Problem by Approximating With Conditionally Optimum Plans, by A. L. Lurye, 13 pp. RUSSIAN, bk, Vychislitel naya Matematika, No 7, 1961, pp 151-160. 9680520

FTD-TT-62-1498

An Experiment in Using the Electronic Computer Strela for Processing Measurements of Meteoric Photographs, by A. K. Sosnova, 13 pp.
RUSSIAN, per, Byul Komissii po Kometam i Meteoram Astronom Soveta, Ak Nauk SSSR, No 4, 1959, pp 35-41.
9679792

FTD-MCL-1201

A Method for Converting a Multidigit Code to a One bigit Code, by V. M. Khrapchenko, 9 pp. RUSSIAN, per, <u>Dok Ak Nauk SSSR</u>, Vol CXLVIII, No 2, 1963.

JPRS 18458

Existence of Periodic Limiting Regimes for a Nonlinear of Ordinary Differential Equations, by S. A. Samedova, 6 pp. RUSSIAN, per, 1z Ak Nauk Azerbaidzhan SSR, Ser Fiz-Matemat i Tekh Nauk, No 2, 1900, pp 27-33.

AIAA Vol I, No 1, 1963

Technical Cybernetics. (SF-2607) RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Tekh Nauk, Tekh Kibernetika, No 1, Jan-Feb 1963, pp 1-208.

*JPRS

Small Denominators. I. Concerning the Representation of a Circle, by V. N. Arnol'd. RUSSIAN, per, Iz Ak Nauk SSSR, Ser Matemat, Vol XXV, 1961, pp 21-86.

*NASA TT F-139

Catalytic Activity of Metal Polychelates, by N. P. Keyer, G. K. Bbjeskov, et al. RUSSIAN, per, Kinetika i Kataliz, Vol III, No 5, 1962, pp 680-690.

*FTD-TT-63-414

Scientific Ma

Mathematics & Data Processing (Contd)	
Machine Learns to Learn, by G. Zelenko, 5 pp. RUSSIAN, per, <u>Litevatuvnaya Gazeta</u> , 7 Jul 1962.	JPRS 14962
On the Initial Temperatures of Reduction of Oxides of Metals With Carbon, by V. P. Yelyutin, R. F. Mcrkulova, 12 pp. RUSSIAN, per, Moskov Institut Stali, Vol XXXVIII, 1958, pp 79-87.	JPRS 18731
Effect of Chemical Heat Treatment on the Heat Resistance of Alloys, by V. P. Yelyutin, Ye. I. Mozzhukhin, 7 pp. RUSSIAN, per, Moskov Institut Stali, Vol XXXVIII, 1958, pp 427-432.	JPRS 18731
Caps of Immersion Pyrometers for Measuring the Temperature of Liquid Metals, by K. S. Kutateladze. RUSSIAN, per, Ogenupory, No 5, 1962, pp 223-225.	*BISI 3216
Use of Linear Programming in Establishing Labor Norms, by M. Zaychik, 14 pp. RUSSIAN, per, <u>Sotsialist Trud</u> , Vol VIII, No 1, 1963, pp 79-86.	JPRS 18356
Of Formulas of Asymptotic Shortwaves in Diffraction Problems, by V. S. Buslayev. RUSSIAM, per, Vest Leningrad Univ, No 13, 1962, pp. 5-21.	*AFCRL Res Lab
Thought and Cybernetics, by V. M. Glushkov, 17 pp. RUSSIAN, per, Voprosy Filosofii, Vol XVII, No 1, 1963, pp 36-48.	JPRS 18302
Device for Multipoint Control of Various Parameters, by A. B. Simkin, A. Kazymov, et al. RUSSIAN, Patent No 147,045, 19 Jul 1960, 4 pp.	*FTD-TT-63-431
On Poincare's Recurrence Theorum, by C. Caratheodory. GERMAN, per, Akademie der Wissenschaften, No 34, 10 Jul 1919, pp 579-584. 9203664	AEC-UCRL Tr-871(L)
Ternary Switching-Circuit Algebra, by Eugen Muhldorf. GERMAN, per, Archiv der Elektrischen Übertragung, Vol XII, Bo 3, 1958, pp 138-148. 9204989	AEC-SCL Tr-453
The Classification of Automation Systems According to Control Principles, by 0. 1. Kukhtenko, 27 pp. UKRAINIAN, per, Avtomatyka, No 6, 1962, pp 69-78.	JPRS 18307

AND THE STATE OF T Scientific Nuclear Science & Technology

Experiments on Microwave Emission at Cyclotron Harmonics of a Cold Plasma, by Mitani, Kubo Hiroshi, et al. RUSSIAN, rpt, Conferences on Nuclear Fusion, Vol IX, No 3, 1962, pp 267-304.

*AEC

Investigation of the Mechanism of Some Heterogeneous Catalytic Processes Using C14-Labeled Compounds, by G. V. Isagulyants, A. A. Balandin. RUSSIAN, rpt, Conference on Radioisotopes in the Physical Sciences and Industry, Copenhagen, 6-17 Sep 1960, Vol III, 1962, pp 245-254. 9203641

AEC-Tr-5502

Immunology of Acute Radiation Injury, by R. V. Petrov, 328 pp. RUSSIAN, bk, Immunologiya Ostrogo Luchevogo Porazheniya, Moscow, 1962, pp 1-267.

JPRS 18620

Analysis of Average Neutron Capture Cross-Sections, by Yu. P. Popov, Yu. I. Fenin. RUSSIAN, rpt, Joint Institute of Nuclear Investigations Nuclear Phys Lab, 1962. 9203656

AEC-Tr-5569

Soviet Research in Radiation Control, by Petr Nikolayevich Kodochigov, 12 pp. RUSSIAN, bk, O Praktichoskikh Voprosakh Dozimetrii Ioniziruyushchikh Izlucheniy, Moscow, 1962, pp 23-26, 74-78.

JPRS 18552

Radioactive Contamination of the External Environment, by V. P. Shvedova, S. I. Shirokova. RUSSIAN, bk, Radioaktivnye Zagryazneniya Vneshneyi Sredy, Moscow, 1902, 275 pp.

*AEC

Problems of Nuclear Meteorology, by I. L. Karolya, S. G. Malakhova. RUSSIAN, bk, Voprosy Yadernoi Meteorologiyi, 1962.

*AEC

An Approximation Formula for Calculating the Geometrical Parameter of Homogeneous Bodies of Arbitrary Shape, by V. K. Bogatyrev, 5 pp. RUSSIAN, per, Atomnaya Energiya, Vol XIII, No 1, 1962, pp 68-70. 9680146

FTD-TT-62-1639

Use of Albedo Method in Examining the Interaction of Subcritical Systems, by V. K. Bogatyrev, 7 pp. RUSSIAN, per, Atomnaya Energiya, Vol XIII, No 1, 1962, pp 70-72. 9680146

FTD-TT-62-1639

FRENCH, rpt, 1963.

Free Education of the American

List of Institutions Approved for Post-Craduate Training, 41 pp. RUSSIAN, per, Byul Ministerstva Vysshego i Srednego Spetsial'nogo Obrazovaniya SSSR, No 2, 1962, pp 1-19. JPRS 18578 Sharp-Surface Symmetrical Shapes of Nuclear Equilibrium, by V. M. Strutinskiy, N. Ya. Lyashchenko, et al. RUSSIAN, per, Iz Ak Nauk SSSR Ordena Lenina Institut AEC-Tr-5493 Atomnoi Energii, 1962, 40 pp. The Adaptation of Radioactive Isotopes to Engineer Research, by N. V. Glazov. RUSSIAN, per, Primenonie Radioaktivnykh Izotopov v Inzhenernykh Izyskaniyakh, Moscow, 1962. 9203233 AEC-Tr-5525 Synergistic and Antagonistic Effects in Extraction of Plutonium Compounds, by M. Taube. RUSSIAN, per, Radiokhimiya, Vol IV, 1962, pp 260-272. AEC-Tr-5399 Discussions of Problems Pertaining to the Biological Action of Radiation, by V. G. Kocherezhkin. RUSSIAN, per, Vest Ak Nauk SSSR, Vol XXXI, 1962, AEC-SCL-T-427 pp 137, 138. The Atom in the Service of Peace - All-Union Seminar on Radioisotopic Measuring Techniques in Tbilisi, 6 pp. RUSSIAN, np, Zarya Vostoka, 16 Oct 1962, p 3. JPRS 18598 Interaction of Configurations in the Carbon Atom, by A. P. Yutsis. RUSSIAN, per, Zhur Eksper i Teoret Fiz, Vol XIX, 1949, pp 565-576. *NASA TT [-154 Generalization of the Theory of the Partial Separation of Variables to the Case of Multivalent Atoms, by A. P. Yutsis. RUSSIAN, per, Zhur Eksper i Teoret Fiz, Vol XXIII, 1952, pp 371-380. *NASA TT F-153 Obtaining Elemental Boron by Hydrogen Reduction of Boron Halides, by L. A. Misel'son, I. V. Petrusevich, 9 pp. RUSSIAN, per, Zhur Prik Khim, Vol XXXV, No 5, 1962, pp 984-989. 9680148 FTD-TT-62-1638 Outline of a Program for the Cabri Reactor, by J. Ailloud, J. P. Millot.

*AEC

Of Spectrometry Isotopic Analysis of Uranium, by J. Olkowsky, L. Cohen. FRENCH, rpt, 1961. 9205018

AEC-Tr-5606

Extrusion of Uranium Oxide, by R. Hauser, J. Mercier. FRENCH, rpt, Compagnie Industrielle des Combustibles Atomiques Frittes, Corbeville, par Orsay Seine-et-Oise, Jan 1961, 35 pp.

AEC-NP-Tr-905

Marcoule Nuclear Centre Prestressed Concrete Shields for Reactors Gs and G3, by Jean Bellier, Max Tourasse. FRENCH, per, Annales Inst Technique du Batiment et des Travaux Publics, 1959, 20 pp.

AEC-DEG-Inf-Ser-39

Measurement of Amplitude Fluctuations in a Rapid Response Photo Multiplier, by P. Raimbault. FRENCH, per, Commissariat a l'Energie Atomique Centre d'Etudes Nucleaires, 1961.

*AEC

Decontamination of Surfaces, by E. Mestre. FRENCH, per, Energie Nucleaire, Vol III, No 5, Sep-Oct 1961, pp 309-318.

Vol XV, No 1, 1954, pp 4A-7A. 9663256

*AEC

Preparation of Thin Films of Formvar Use as Supports for Metallic Layers in Nuclear Physics, by P. Barreau, P. Leger, 9 pp. FRENCH, per, Le Journal de Physique et le Radium,

Navy/NRL Tr 930

Influence of Voids Between Core and Reflector on the Criticality and/or Reactivity of a Reactor, by O. Machnig, P. Handge.
GERMAN, per, Atomkernenergie, Vol VI, 1961, pp 434-440.

AEC-Tr-5480

Loop for Investigation of Heat Transfer and for Obtaining Operating Experience With Organic Reactor Coolants, by H. Abel-Larsen. GERMAN, per, Atomkernenergie, Vol VII, No 11, 1962, pp 403, 404.

*UKAEA Windscale Tr No 37

A simple Method for Determining the Emission of Tritium by Activated Luminous Substances in the So-Called Immersion Test, by E. H. Graul, R. Futterknecht, et al.
GERMAN, per, Atompraxis, Vol VIII, No 5, 1962, pp 175-182.

AEC-Tr-5557

Radiation Measurements in Medical Radiology, by H. R. Schinz, R. Wideroe.

CERMAN, per, Fortschritte auf dem Gebiete der Rontgenstrahlen und der Nuklearmedizin, Vol XCVII, No 1, 1962, p 63. 9205017

AEC-Tr-5608

Measurement of Radioactivity at the Czechoslovak Water Works Laboratories Compared With Foreign Measurement Technology, by J. Pavdernik, 6 pp. GERMAN, per, Isotopen Technik, Vol II, No 11, 1962, pp 341-343.

JPRS 18391

A Laboratory Study of Chlorination-Based Processing of Neutron-Irradiated Uranium Fuel Elements, by D. Naumann.
GERNAN, per, Kernenergie, No S, 1962, pp 118, 119.
9205019

AEC-Tr-5605

Selection of K* Mesons in a Secondary Beam of Saturne, by J. Seguinot, J. Teigor, et al. GERMAN, per, Nuclear Instruments and Methods, Vol X, 1961, pp 205-211.

*AERE Harvell

The Physics of Nuclear Fission, by A. Kraut. GERMAN, per, Nukleonik, Vol II, No 33, 1960.

JPL

The Impurities in Nuclear Pure Graphite and Their Effects on the Absorption Cross Section for Thermal Neutrons, by E. Fitzer, W. Gebauhr, et al. GERMAN, per, Nukleonik, Vol IV, No. 1-9, 1962.

*AEC

Determination of Rare Earths in Graphite by Activation Analysis, by W. Gebauhr, J. Martin. GERMAN, per, <u>Mukleonik</u>, Vol IV, No 9-18, 1962.

*AEC

Cybernetic Aspects of Statistics, by Klaus-Jergen Richter, 12 pp. GERMAN, per, Statistische Praxis, No 1, 1963, pp 15-19.

JPRS 18579

Derivation of 21 New Short-Lifetime Isomers by Heans of Nuclear Photoreactions, 21 pp. GERMAN, per, Z fuer Physik, No 165, 1961, pp 99-120.

Navy Tr 3366 NRL 928

Ninth Congress of Hungarian Physicists, Debregen, 1962, 7 pp.
HUNGARIAN, per, Fizikai Szemle, Vol XII, No 12, 1962, pp 357-360.

JPPS 18564

Study of the Nature of the Active Surface of Solid Catalysts. I. Active Surface of CR₁₀₃ and NiO According to Radiochemical Data, by M. Fiti. ITALIAN, per, Studii si Cercetari de Fizica, Vol XII, No 2, 1961, pp 357-367.

NLL M 6360

Measurement of the Dust Distribution in the Dust Catcher of a Blast Furnace, by Shiro Shono, Snunichi Komaki.

JAPANESE, rpt, Proceedings of the Fourth Japan Conference on Radioisotopes, Tokyo,

10-12 October 1961, 1962, pp 181-183. 9204984

Aug 5613

The Application of X-Ray Absorption Analysis Utilizing Radioisotopes to the Analyses of Fuels, by Shigemasa Enomoto, Tomohiko Furuta, et al. JAPANESE, rpt, Proceedings of the Fourth Japan Conference on Radioisotopes, Tokyo, 10-12 October 1961, 1962, pp 197-201. 9204983

AEC-Tr-5614

Low Power Calibration by the Source Introduction Method, by Setsuo Kobayashi, Iwao Kobayashi. JAPANESE, per, Journal of the Atomic Energy Society of Japan, Vol XV, No 6, 1962, pp 355-361. 9203665

AEC-NP Tr-933

Generating Monochromatic Neutron Groups Through Total Reflection, by Rolf Stockmeyer. POLISH, per, <u>Mukleonika</u>, Vol IV, No 6, Aug 1962, pp 266, 267.

*AEC

A Blanket for the Suppression of Fires and for Protection Against Thermal and Radioactive Radiation, by Giryn Wieslaw, Kazimierz Grzeszczyk. POLISH, Patent No 40,188 Class 61A, 10/01 of 8 Aug 1956.

*FTU-TT-63-369

A Rule Concerning the Variation of the Atomic and Ionic Radii and the Ionization Potentials, by Dimitru D. Procopiu.

RUMANIAN, per, Acad Rep Populare Romine, Institute Fiz Studii Corcetari Fiz, Vol IV, Jan-Jun 1953, pp 27-68.

*AEC

Escape Probability and Its Application to the Calculation of the Dancoff Coefficient in the Resonance Integral, by G. Velarde.

SPANISH, per, Energia Nuclear, No 5, Jul-Sep 1961, pp 24-47. 9205006

AEC-IW-Tr-44

Scientific Physics

The Physics of Combustion and Explosion, by L. N. Khitrin.
RUSSIAN, bk, Fizika Goreniya i Vzryva, 1957.

OTS 61-31205 PL-480

On the Process of Combustion of a Fuel Flow Together with Evaporation of Water in a Common Reaction Volume, by B. V. Kantorovich, V. M. Ivanov, 16 pp. RUSSIAN, bk, Ispol'zovaniye Goryuchikh Gazov v Narodnom Khozyzystve, No 3, 1962, pp 22-31. 9668196

FTD-TT-62-1469

Outlines of the Physics of Metals, by B. Ya. Pines, 371 pp.
RUSSIAN, bk, Ocherki po Metallofizike, 1961, pp 1-315. 9668187

FTD-TT-62-1355

Symmetric Equilibrium Models of a Nucleus With Broken Surfaces, by V. M. Strutinskiy, N. Ya. Lyashchenko, et al.
RUSSIAN, rpt, Order of Lenin Institute for Atomic Energy, I. V. Kurchatov, of the Academy of Sciences of the USSR, Moscow, 1962.

*AEC

The Maximum Principle in the Theory of Optimal Control Processes, by V. G. Boltyanskiy, R. V. Gamkrelidze, et al, 23 pp.
RUSSIAN, bk, Trudy Printsip Maksimuna v Teorii Optimal'nykh Protsessov Upravleniya, Vol II, Moscow, 1901, pp 457-470. 9668314

FTD-TT-62-1746

Charged-Particle Accelerators, by B. S. Ratner, 114 pp. RUSSIAN, bk, Uskoriteli Zaryazhennykh Chastits, Moscow, 1960, pp 1-112. 9680265

FTD-TT-62-957

Problems of Magnetohydrodynamics and Plasma Dynamics II, 646 pp.
RUSSIAN, bk, Voprosy Magnitnoy Gidrodinamiki i
Dinamiki Plazmy II, 1962, pp 1-660. 9668186-V

FTU-TT-62-1301

Problems of Magnetic Measurements, by L. D. Nesterenko. RUSSIAN, bk, Voprosy Magnitnykh Izmereniy, Sbornik Trudov Instituta Elektrotokhniki, Vol XVIII, 1961, pp 1-126.

*ACSI I-2495 ID 2232440

Protection of Niobium From High-Temperature Gas Corrosion, by A. I. Borisenko, 55 pp. RUSSIAN, bk, Zashchita Niobiya ot Vysokotemperaturnoy Gazovoy Korrozii, 1961, pp 1-40. 9668347

FTD-TT-62-1251

Heat Transfer in the Region of Thermal Stabilization for Liquid Metals Flowing Turbulently in a Tube, by V. I. Subbotin, M. Kh. Ibragimov, et al, 10 pp. RUSSIAN, por, Atomnaya Energiya, Vol XIII, No 2, Aug 1962, pp 155-161. 9680245

AID Rpt T-63-22

Equilibrium of Toroidal Plasma Pinch in Magnetic Field, by V. D. Shafranov. RUSSIAN, per. Atomnaya Energiya, Vol XIII, No 6, 1962, pp 521-529.

*FTD-TT-63-374

Coherent Radiation of Synchrotron Electron Clusters in a Closed Reasonator, by J. Vaclavik, 11 pp. RUSSIAN, per, Chekhoslovatskiy Fiz Zhur, Vol XII, No 6, 1962, pp 432-438. 9668344

FTD-TT-62-1747

Bending of a Prismatic Beam Under Conditions of Non-Stationary Creep, by U. Zhui-Fyn. RUSSIAN, per, Dok Ak Nauk Aryanskoy SSR, Vol XXX, No 3, 1960, pp 139-149.

Army Materiel Command FLRS Tr Log No 109

The Negative Concentration Effect in Thermal Diffusion of Gases in Porous Media, by B. N. Goshchitsky, I. S. Izrailevich, 6 pp.
RUSSIAN, per, Dok Ak Nauk SSSR, Vol CXLVII, No 4, 1962, pp 817, 818.

JPRS 18180

Computing the Speed of the Normal Propagation of a Flame in a Mixture of Hydrogen and Chlorine, by A. G. Istratov, V. B. Librovich, 9 pp. RUSSIAN, per, Dok Ak Nauk SSSR, Vol CXLIII, No 6, 1962, pp 1380-1383. 9668325

FTD-TT-62-1687

A Kinetic Description of Quasi-Equilibrium Turbulent Processes in a Plasma, by Yu. L. Klimontovich, 7 pp. RUSSIAN, per, Dok Ak Nauk SSSR, Vol CXLIV, No 5, 1962, pp 1022-1025. 9668332

FTD-TT-62-1795

Fuel Additives, an Effective Means for Raising the Motor Power of Power Installations, by P. P. Botkin, 11 pp.
RUSSIAN, per, Energomash, No 6, 1962, pp 26-28.
9668243

FTD-TT-62-1931

Some Special Measurements of Magnetic Density, by A. A. Braude, 13 pp.
RUSSIAN, per, Fiz Metal i Metallov, Vol XIII, No 6, 1962, pp 832-841. 9668237

FTD-TT-63-1

The Accuracy of Determination of the Size of Coherent Scattering Regions and the Magnitude of Microstresses by the Method of Harmonic Analysis of the Shape of and Interference Line, by G. A. Sirenko, V. I. Khotevich. RUSSIAN, per, Fiz Metal i Metallov, Vol XIV, No 1, 1962, pp 55-60.

NLL M 5019

A Comparison of X-Ray and Electron Diffraction Data on the Size of Crystalline Blocks in Strained Stainless Steel and Nickel, by Y. D. Tyapkin, M. P. Usikov. RUSSIAN, per, Fiz Met i Metallov, Vol XIV, No 1, 1962, pp 85-91.

NLL M 5018

X-Ray Determination of Diffusion Coefficients, by M. A. Levitskaya, N. A. Vodop'yanova. RUSSIAN, per, Fiz Tverdogo Tela, Vol IV, No 2, 1962, pp 458-460.

NLL M 5020

On the Theory of Electroplethysmography, by Yu. E. Moskalenko, A. I. Naumenko. RUSSIAN, per, Fiziol Zhur SSSR, Vol XLII, No 3, 1956, pp 312-316.

*NASA TT-F-157

Physiological Mechanisms of Cehmical Thermoregulations, by K. P. Ivanov, 14 pp.
RUSSIAN, per, Fiziol Zhur SSSR, Vol XLVIII, No 4, 1962, pp 436-443. 9680007

FTU-TT-62-1176

Device for Measuring the Temperature Coefficient of Small Magnets, by V. N. Bobrov. RUSSIAN, per, Geomagnetizm i Aeronomiya, Vol II, No 3, 1962, pp 550-552.

*FTD-TT-63-423

Ionization in Upper Atmosphere of Shortwave Solar Radiation, by G. S. Ivanov-Kholodnyi. RUSSIAN, per, Geomagnetizm i Aeronomiya, Vol II, No 4, 1962, pp 674-687.

*AFCRL Res Lab

Selected Articles From the Russian Periodical Inzhenerno-Fiz Zhur.

Vol III, No 9, 1960, pp 10-16. 9668321. The Effect of Mixing of a Material in a Fluidized Bed Upon Heat Transfer Between a Gas and Particles, by A. P. Baskakov, 13 pp.

FTD-MCL-1289

Vol V, No 4, 1962, pp 25-30. 9668324 Heating of a Plate at a Shifting Heat Exchange Surface, by K. N. Chakalev, 9 pp. FTU-TT-62-1770

Selected Articles From the Russian Periodical Inzhenerno-Fiz Zhur. (Contd)

Introductio-LTS Turit (contra)	
Vol V, No 5, 1962. Hydrodynamics and Heat Transfer of the Turbulent Flow of an Incompressible Fluid in the Gap Botween Rotating Coaxial Cylinders, by Yu. A. Koshmarov, 14 pp, (pp 5-14). 9668349	FTD-TT-62-1743
Analysis of Experimental Thermal Values and Equation of State for Hydrogen, by V. A. Rabinovich, 12 pp, (pp 30-37). 9679878	FTD-TT-62-1569
Vol V, No 6, 1962, pp 3-7. 9668339 Variation in the Length of the Combustion Zone of a Homogeneous Mixture in a Turbulent Flow as a Function of Pressure, by V. S. Pelevin, 9 pp.	FTD-TT-62-1744
Vol V, No 7, 1962. Effect of Diffusion Factors on Flame Stability, by V. N. Iyevlev, S. A. Gol'denberg, 7 pp, (pp 18-22). 9668340	FTD-TT-62-1804
Heat Exchange in the Horizontal Surfaces of Heat Insulating Structures Slotted With Metal in Deep Cooling Systems, by N. V. Krylov, K. I. Strakhovich, 8 pp, (pp 28-33). 9668340	
Vol V, No 8, 1962, pp 10-16. 9680269 Heat Transfer in a Turbulent Fluid Flow at Large Pradtl Numbers and Variable Viscosity, by Ts'ai K'uo-en, 9 pp.	FTD-TT-62-1890
Calculating Turbulent Jets at a Very High Temperature, by V. A. Golubev. RUSSIAN, per, Inzhenernyy Zhurnal, Vol I, No 4, 1961, pp 51-58.	*FTD-TT-63-388
Concerning the Calculation of the Molecular Com- position of Air for a Determination of the Coefficient of Aerodynamic Forces and the Temperature of the Body in a Free Molecular Stream at High Supersonic Speeds, by V. S. Galkin.	
RUSSIAN, per, Inzhenernyy Zhur, Vol I, No 1, 1962, pp 175, 176.	*FTD-TT-63-361
Electrical Discharge in Water, by N. V. Filippov, V. V. Zhuin.	
RUSSIAN, per, Inzhenernyy Zhurnal, Vol II, No 4, 1962, pp 341-343.	*FTD-1T-63-385

On Series of Taylor-Dirichlet Type, by G. L. Lunts. RUSSIAN, per, 1z Ak Nauk Armyanskoy SSSR, Fiz Matemat Nauk, Vol XIV, No 2, 1961, pp 7-16.

An Application of Taylor-Dirichlet Series for Estimating the Growth of the Entire Functions, by G. L. Lunts.

RUSSIAN, per, Iz Ak Nauk Armyanskoy SSSR, Fiz Matemat Nauk, Vol XIV, No 5, 1961, pp 3-8.

*NRL

*NRL

A Study of Heat Transfer in a Circular Channel, by Kh. A. Barlybayev, S. V. Bukhman, 15 pp. RUSSIAN, per, Iz Ak Nauk Kazakhskoy SSR, Seriya Energet, No 1 (19), 1961, pp 21-29. 9668338

FTD-TT-62-1642

Theory of Transfer Processes in a Plasma Across a Magnetic Field, by V. P. Silin.
RUSSIAN, per, Iz Ak Nauk SSSR, Instit Fiz imeni
P. H. Lebedeva, 1962, 13 pp.

AEC-UCRL Tr-869(L)

Oscillations of a Weakly Heterogeneous Plasma, by V. P. Silin.
RUSSIAN, per, Iz Ak Nauk SSSR, Instit Fiz imeni
P. N. Lebedova, 1962.

*AEC

Application of Low Angle Scattering of X-Rays to the Study of Ultra Fine Porosity of Coal, by M. A. Davydova, G. M. Plavnik. RUSSIAN, por, Iz Ak Nauk SSSR, Otdel Tekh Nauk, No 6, 1960, pp 150-155.

CRL/T 1042

On the Theory of an Asynchronous Magnetohydrodynamic Generator With a Rotating Field, by Ye. I. Yantovskiy, I. M. Tolmach, 16 pp.
RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Tekh Nauk,
Energet i Avtomat, No 3, 1962, pp 32-41. 9668248

FTD-TT-62-1797

Thermionic Electron Emission of Hollow-Type Cathode, by M. B. Pyt'veva, Ye. M. Dubinina.
RUSSIAN, per, Iz Ak Nauk SSSR, Ser Fiz, Vol XXVI,
No 11, 1962, pp 1343-1348.

*FTD-TT-63-367

On Photoelectric Measurements of the Nightglow of the Sky, by A. D. Bolyunova, V. M. Morozov, 9 pp. RUSSIAN, per, Iz Ak Nauk SSSR, Ser Geofiz, No 2, 1959, pp 321-325. 9680253

AID Rpt T-63-22

Application of the Langmuir Probe Method for Investigating Deionizing Plasma, by V. A. Ivanchenko, 12 pp. RUSSIAN, per, Iz Nauch-Issled Inst Postoyannogo Toka, No 7, 1961, pp 5-13. 9668238

FTI)-TT-62-1734

Temperature Dependence of Magnetostriction and Coefficient of Linear Expansion of Elinvar, by A. Ya. Vlasov, B. A. Ayurzanayn, 7 pp. RUSSIAN, per, Iz Sibir Otdel Ak Nauk SSSR, No 6, 1962, pp 99-102. 9680345

FTD-TT-63-7

Aerodynamic Compression of a Gas Stream, by Ye. D. Nesterov, 13 pp. RUSSIAN, per, Iz Vysshikh Ucheb Zaved, Aviats Tekh, No 1, 1962, pp 82-91. 9679884

FTD-TT-62-1555

Theory of the Discharge of a Boiling Liquid Through a Swirl Jet, by V. A. Makhin, V. F. Prisnyakov, 16 pp. RUSSIAN, per, Iz Vysshikh Ucheb Zaved Aviats Tekh, No 3, 1962, pp 166-176. 9668251

FTD-TT-62-1836

Permeability and Losses of Magnetic Powder Materials on the Base of Carbonyl Ferro Powders, by I. S. Tolmasskiy.
RUSSIAN, per, Iz Vysshikh Ucheb Zaved Elektromekh, Vol IV, No 6, 1961, pp 3-18.

NLL M 3995

Fundamentals of the General Theory of Quasi-Analog Systems, by G. Ye. Pukhov, 33 pp. RUSSIAN, por, Iz Vysshikh Uchob Zaved, Elektromekh, No 9, 1961, pp 3-21. 9680262

FTD-TT-62-1557

A Pulso-Separation Circuit for Servosystom, by N. S. Anishin, 6 pp. RUSSIAN, per, 1z Vysshikh Ucheb Zaved, Elektromekh, No 6, 1962, pp 646-649. 9668245

FTD-TT-62-1834

Selected Articles From the Russian Periodical Iz Vysshikh Ucheb Zaved, Fiz.

No 3, 1962, pp 65-73. 9668233 Relaxation Processes in Dielectrics and Semiconductors, by P. T. Oreshkin, S. B. Bykov, 16 pp.

FTD-TT-63-3

No 5, 1962. Dielectric Prop of Gamma Irradiated Insulating Materials, by B. I. Vorozhtsov, V. N. Nesterov, et al, (pp 34-37). *FTD-TT-63-350

Electric Molding of Point-Contact Diodes, by A. P. Vyatkin, A. A. Vilisov, (pp 38-45).

Selected Articles From the Russian Periodical Iz Vysshikh Ucheb Zaved, Fiz. (Contd)

No 5, 1962. On the Changes in Dielectric Losses in Crystalizing Polymers Due to the Effect of Ionizing Radiating, by N. I. Olshanskaya, B. I. Vorozhtsov, (pp 150-155).

Temperature Dependence of the Saturation Magneto-Striction of Silicon-Iron Single Crystals, by A. Ya. Vlasov, I. L. Gus'kova, (pp 156-160).

On the Soleness of Solution of Basic Problem Concerning Free Thermal Convection of Liquid, by I. G. Sevruk, 6 pp.
RUSSIAN, per, Iz Vysshikh Ucheb Zaved Matematika Kazan, No 4, 1958, pp 218-221. 9679882

Theory of Superconductivity, by N. N. Bogolyubov, 11 pp.
RUSSIAN, per, Nauka i Zhizn, No 8, 1958, pp 17-20.

Application of the Theory of Viscous Flow to the Sintering of Powders by Hot Pressing, by M. S. Koval'chenko, G. V. Samsonov. RUSSIAN, per, Poroshkovaya Metallurgiya, Vol I, No 2, 1961, pp 3-13. 9203651

The Energy of Sound Waves Propagated in Moving Media, by O. S. Ryzhov, G. M. Shefter. RUSSIAN, per, Prik Matemat i Mekh, Vol XXVI, 1962, pp 354-367.

On the Superposition of Ordinary Steady Flows With a Limited Afterefrect, by N. P. Buslenko, 6 pp.
RUSSIAN, per, Problemy Peredachi Informatsii, No 9, 1961, pp 79-82. 9680021

Separation of Molybdenum and Iron by Ion-Exchange Chromatography, by I. P. Alimarin, A. M. Med.
RUSSIAN, per, Trudy Instit Geokhim i Anal Khim, Ak Nauk SSSR, Komissi po Analiticheskoy Khimiy, Vol VI, 1955, pp 351-364.

A Magnetic Trap for Colliding Beams, by Zh. S. Takibayev, 14 pp. RUSSIAN, bk, Trudy Inst Yadernoy Fiz, Alma-Ata, Fiz Chastits Vysokikh Energiy, Struktura Yadra, Ak Nauk Kazakhskoy SSR, Vol V, 1962, pp. 147-154. 9668517 *FTD-TT-63-350

FTD-TT-62-1613

FTD-TT-62-1714

AEC-Tr-5572

*ACSI I-2338 ID 2229413

FTD-TT-62-1383

*AEC

FTD-11-62-1901

The Problem of Determing the Wave Bending Moment, by D. M. Rostovtsev. RUSSIAN, per, Trudy Leningrad Korablestroitel Inst, No 32, 1960, pp 35.

NLL M 3936

An Investigation of Wetting of the Solid Surfaces of Certain High-Melting Compounds by Molten Metals, by V. N. Yeremenko, Yu. V. Naydich, 22 pp.
RUSSIAN, per, Trudy Seminara po Zharostoykim Materialam, No 4, Iz Ak Nauk Ukraniskoy SSR, 1959, pp 38-51. 9668337

FTD-TT-62-1252

Maximum Gas-Bubble Pressure Method as Applied to Determination of Surface Tension of Metals of the Iron Family, by V. V. Fesenko, V. N. Yeremenko, 22 pp.
RUSSIAN, per, Trudy Seminara po Zharostoykim Materialam, No 4, Iz Ak Nauk Ukraiskoy SSR, 1959, pp 52-64. 9668337

FTD-TT-62-1252

Changes in Magnetic Properties of Inorganic Solids in a Field of Intense Gamma Radiation, by S. V. Starodubtsev, I. M. Glaunshteyn, RUSSIAN, por, Trudy Vses Soveshchaniya po Radiatsionomy Khim, No 2, 1962, pp 683-687.

*FTD-TT-63-424

Baking, Creep, Rest, Recrystallization and Other Phenomena, Conventional Selfdiffusions in Crystalline Bodies, by B. Ya. Pines. RUSSIAN, per, Uzpekh Fiz Nauk, Vol LII, No 4, 1954, pp 501-559. 9204994

AEC-Tr-5563

Problem of Controlled Thermonuclear Synthesis, by L. A. Artsimovich, 18 pp. RUSSIAN, per, Vest Ak Nauk SSSR, No 1, 1962, pp 7-15. 9668333

FTD-TT-62-1788

New Investigations on the Physics of Low Temperatures, by I. M. Khalatnikov, 5 pp. RUSSIAN, per, Vest Ak Nauk SSSR, No 2, 1962, pp 111, 112. 9668343

FTD-TT-62-1715

Problems of High Temperature Heat Physics, by V. A. Kirillin, 7 pp. RUSSIAN, per, Vest Ak Nauk SSSR, No 2, 1963, pp 38-43.

JPRS 18497

The Part Played by Cascade Transitions in the Excitation of Helium Lines, by V. E. Yakhontova. RUSSIAN, per, Vest Leningrad Univ, Ser Fiz i Khim, Vol XIV, No 10-12, 1959, pp 27-42.

*AERE Harwell

And Superior of the Comment of

Interaction of Particles in Nonlinear Electrodynamics, by V. M. Linkin, N. N. Kolesnikov, 15 pp. RUSSIAN, per, Vest Mosk Univ Seriya III, Fiz, Astron, No 3, 1962, pp 17-26. 9668199

FTD-TT-62-1832

Viscosity of Melted Zinc, Aluminum, Cadmium and Antimony, by G. I. Goryaga, I. A. Nosyreva, 8 pp.
RUSSIAN, per, Vest Mosk Univ Ser Mat Mekh Astron Fiz Khim, Vol XIII, No 6, 1958, pp 59-64.

FTD-TT-62-1697

Polymerization of Methylmethacrylate in a Strong Direct Electric Field, by M. M. Khaletskiy, B. I. Sukhorukov. RUSSIAN, per, Vysokomolek Soed, Vol III, 1961, pp 1347-1351. 9205022

AEC-UCRI.-Tr-906(L)

Ion-Atom Interaction in Gas, by L. A. Sena. RUSSIAN, per, Zhur Eksper i Teoret Fiz, Vol IX, No 11, 1939, pp 1320-1331. 9204979

AEC-Tr-5615

On the Theory of Superconductivity, by V. L. Ginzburg, L. D. Landau, 26 pp. RUSSIAN, per, Zhur Eksper i Tooret Fiz, Vol XX, 1950, pp 1064-1082. 9202876

ACSIL Tr 1247

Mechanism of Aging of Infrared Emulsions, by A. S. Kheinman. RUSSIAN, per, Zhur Nauch i Prik Fotograf i Kinematog, Vol V, No 4, 1960, pp 297, 298.

NLL M 8967

Silver Chlorobromide Photographic Emulsions With Grains Having a Laminated Structure, by Yu. M. Prokhotskiy, Yu. B. Vilenskiy. RUSSIAN, per, Zhur Nsuch i Prik Fotograf i Kinematog, Vol V, No 5, 1960, pp 363, 364.

NLL M 8969

Photography and Visual Observation by Means of High-Frequency Currents, by S. D. Kirlian, V. Kh. Kirlian, 15 pp.
RUSSIAN, per, Zhur Nauch i Prik Fotograf i Kinematog, Vol VI, No 6, 1961, pp 397-403.
9668246

FTD-TT-62-1549

Investigations in Pyridiltiazolilme Thane Spans, by V. G. Ermolayeva, M. N. Shchukina. RUSSIAN, per, Zhur Obshch Khim, Vol XXXII, 1962, pp 2664-2670.

*AFCRL Res Lab

للمهراء المتابين والمساليات

Selected Articles From the Russian Periodical Zhur Prik Mekh i Tekh Fiz.

No 1, 1962. 9668354 FTD-TT-62-1695 Magnetohydrodynamic Problems Concerning Settled Convection in Vertical Channels, by S. A. Regirer, 7 pp, (pp 15-19). On the Influence of Prandtl Number Variability on the Flow in the Vicinity of Critical Point of an Obtuse Body at Small Reynolds Numbers, by I. N. Murzinov, 8 pp. (pp 39-43). No 3, 1962, pp 10-14. 9668252 FTD-TT-62-1893 Determination of the Optimum Composition of Gaseous Mixtures Containing an Easily Ionizable Additive, 10 pp. FTD-TT-62-1810 No 4, 1962, pp 10-20. 9668250 Invariant Group Solutions of the Equations of a Planar Stationary Beam of Charged Particles, by V. A. Syrovoy, 21 pp. High Temperature Plasma and Plasma Pinch in Longitudinal Magnetic Field, by Ye. F. Tkalich, V. S. Tkalich. RUSSIAN, per, Zhur Tekh Fiz, Vol XXXII, No 12, 1962, pp 1418-1427. *FTD-TT-63-375 Ion Counter, by A. P. Shchetilin. RUSSIAN, Patent No 147,263, 27 Apr 1961, *FTD-TT-63-433 3 pp. Solution of Heat Conductivity Problems by the Method of Grids. BELO-RUSSIAN, per, Inzhenerno-Fiz Zhur, Ak Belorussk SSR, No 3, 1961, pp 78-82. *NASA TT F-151 Thermophysical Properties of Molten Metals, by Yu. P. Os'minin. BELO-RUSSIAN, per, Inzhenerno-Fiz Zhur, Ak Nauk Belo SSR 5, No 2, 1962, pp 108-112. 9203638 AEC-Tr-5454 Transient Oscillations of the Free Surface and the Interface of Two Fluids Under the Action of Shifting Pressures, by L. V. Cherkesov, 5 pp.

FTD-TT-62-1838

BELO-RUSSIAN, per, Iz Ak Nauk BSSR, Seriya Fiz-

Tekh Nauk, No 1, 1962, pp 30-33. 9668200

Theory of Pulse Counters and Its Application, by Zdenek Koutsky, 26 pp. CZECH, per, Aplikace Matematiky, Vol VII, No 2, 1962, pp 116-140. 9679782

FTD-TT-62-1307

New Methods of Raising the Accuracy of Gearing Manufacture, 6 pp.
CZECH, per, Strojirenska Vyroba, Vol VIII,
No 5, 1960, pp 213, 214. 9668323

FTD-TT-62-1779

The Connection Between the Laminar Flow of Pure Gases Through Pipes and the Self-Diffusion Factor, by S. Weber.

DANISH, rpt, Kongelige Danske Videnskab Selskab, Mat-Fys Medd, Vol XXVIII, No 2, 1954.

*AERE Harwell

The Effect of Ionizing Radiation on Proteins, by R. Braams.

DUTCH, per, Atoomenergie on hear Toepassingen, Vol IV, No 3, 1962, pp 47-59, 9205004

AEC-NP-Tr-934

Effects of Supports on the Flow Outflow Behind a Body, by P. Robuffet. FRENCH, rpt, Mar 1959, 42 pp.

AEC-SCL-T-444

Relation Between the Luminescence and the Relaxation of Gas and Vapor Gravitation in Certain Liquids Subjected to Ultrasonic Radiation, by M. Degrois, B. Badilian. FRENCH, rpt, Fourth International Congress on Acoustics, No 44, Coponhagon, 21-28 Aug 1962,

*USRL Tr 28

Influence of Pressure on the Diffusions Which Produce Intermetallic Compounds, by Y. Adda, M. Beyaler, et al. FRENCH, rpt, Reactivity of Solids, 1961, pp 512-524. 9205014

AEC-IIW-Tr-46

Investigation and Development of a Mass Spectrometer of the Omegatron Type. Its Use for the Detection of Leaks and the Analysis of Gases at Low Pressures, by R. J. Warnecke, 59 pp. FRENCH, per, Annales de Radioelectricite, Vol XIV, 1959; Vol XV, No 60, 1960. 9202880

ACSIL Tr 1321

Selected Articles From the French Periodical Comptes Rendus.

No 196, 1933, pp 536-538.

New Method for Determining the Moduli of Elasticity, by Paul LeRolland, Pierre Sorin.

No 254, 1962. Phenomenon of Relaxation in Solutions Subjected to Ultrasonic Radiation, (pp 231-233).

Influence of the Phenomenon of Relaxation
Produced in Solutions Subjected to Ultrasonic
Radiation on the Efficacy of Chemical and
Luminescent Effects, (pp 837-839). *US

Relaxation of Gas and Vapor Cavitations in Solutions Subjected to Ultrasonic Radiation, by M. Degrois, B. Badilian, (pp 1213-1215).

Investigations of Non-Negative Signals Through Linear Filters, by W. Lukosz. FRENCH, per, Optica Acta, Vol IX, No 4, 1962, pp 335-364.

Oxides of the Low Temperature Oxidation of Niobium and Tantalum, by G. Brauer, Horst Mueller, et al. GERMAN, rpt, 24 pp.

Electrokinetics of the Phase Boundary, by A. J. Rutgers.
GERMAN, bk, Elektrokinetica van de Phase-Grens, 1947.

Proof of the Impossibility of Ergodic Gas Systems, by Artur Rosenthal. GERMAN, per, Annalen der Physik, Ser 4, Vol XLII, 1913, pp 796-806. 9205001

Selected Articles From the German Periodical Annalen der Physik.

Vol XLII, 1913, pp 1061-1063. Proof of the Imposibility of Ergodic Mechanical Systems, by M. Plancherel.

Vol XXVI, 1936, pp 233-257. The Structure of Thin Metal Layers Evaporated on Rock Salt, by L. Bruck.

*USLR Tr 24

*USRL Tr 25

*USRL Tr 26

*AFCRL Res Lab

AEC-Tr-5298

*AEC

AEC-UCRL-Tr-873(L)

AEC-UCRL-Tr-874(L)

*AERE Harwell

Selected Articles From the German Periodical Annalen der Physik. (Contd)

Vol XXXIV, No 4, 5, Feb 1939, pp 359-376. Elasticity of Monocrystalline Alkali-Metals at Low Temperature, by Ottmar Bender, 20 pp.

ACSI I-8294 ID 2224774

Vol IX, No 7, 1962, pp 168-173. 9204992 Equation of State of a System of Charged Particles, by G. Kelbg. AEC-UCRL-Tr-860(L)

Stabilization of Flow Distribution in Forced-Flow Heating Surfaces, by P. Profos. GERMAN, per, Energie, Vol XI, No 6, 1959, pp 241-247. 9204981

AEC-GA-Tr-2704

Investigations on the Practical Applicability of Coramic Electrets, by E. Schleicher, 12 pp. GERMAN, per, Experimentelle Technik der Physik, Vol X, No 3, 1962, pp 224-230. 9680273

FTD-TT-62-1925

Electrical Field Gradients in Ion Crystals, by E. Brun, S. Hafner, et al. GERMAN, per, Helvetica Physica Acta, Vol XXXIV, 1961, pp 391, 392.

AEC-SCL-T-440

Problems of Industrial Isotope Measurement Techniques, Parts I and II, by E. Schurz. GERMAN, per, Isotopen Technik, No 1, 1960/61, pp 136, 137; 200-203.

AEC-NP-Tr-921

Flow Resistance and Heat Transfer in Annuli With Roughened Inner Tubes, by H. Brauer. GERMAN, per, Kerntechnik, Vol III, 1961, pp 387-391.

AEC-Tr-13

Ultrasonic Testing of Sheet by Means of Lamb Waves, by W. Lchfeld. GERMAN, per, Material-Prufung, Vol IV, No 9, 1962, pp 331-337.

*HB 5877

Testing of Very Thin-Walled Tubes for Fuel Cans Under External and Internal Pressure, P. Bettziech. GERMAN, per, Nukleonik, Vol IV, No 4, Jun 1962, pp 184-189.

*AEC

Theory of Photoelectron Emission in Metals.

I. Calculation of the External Energy Angular Distribution. II. Distribution of the Photo Electrons, by Heinz Puff.

GERMAN, per, Physica Status Solidi, Vol I, 1961, pp 639-649; 704-715.

*AEC

The Plastic Characteristics of Nickel-Cobalt Single Crystals, by W. Pfeiffer, A. Seeger. GERMAN, por, Physica Status Solidi, Vol II, 1962, pp 668-691. 9203406

AEC-Tr-5568

Sputtering of Solids, by R. Behrisch. GERMAN, per, Physik und Astrophysic, 14 Apr 1961.

*AERE Harwell

Vacuum Pumps, by W. Armbruster. GERMAN, per, <u>Technische Rundschau</u>, No 12, 1961, 16 pp.

AEC-NP-Tr-918

Adsorption of Uranium from Alcoholic Hydrochloric Acid Solution on Strongly Basic Anion Exchanger Dowex-1, by J. Korkisch, P. Antal, et al. GERMAN, per, Z Analytische Chemie, Vol CLXXII, 1960, pp 401-408. 9204974

AEC-GAT-Z-Tr-5036

Growth and Morphology of Ain-Single Crystals, by W. Kleber, H. D. Witzke.
GERMAN, per, Z fuer Kristallographic, Vol CXVI, 1961, pp 126-133. 9204999

AEC-UCRL-Tr-882(L)

Investigation of Several Optimum Time Control Systems of the Second Order, by U. Engmann. GERMAN, per, Zeitschrift fuer Messen, Steurn, Regeln, No 7, 1962, pp 299-305.

*FTD-TT-63-409

Methods for Automatic Optimization of Control Systems, by R. Schabiltz.
GERMAN, por, Z fuer Messen, Steurn, Regeln, No 7, 1962, pp 311-317.

*FTD-TT-63-409

The Thermoelectric Power of Thin Metallic Films, by E. Justi, M. Kohler, et al. GERMAN, per, Zeit fuer Laturforschung, Vol VIa, 1951, pp 456-459. 9203658

AEC-UCRL-Tr-892-L

Compression of a Plasma Column in a Magnetic Quadrupole Field, by J. Christiansen, 23 pp. GERMAN, per, Z fuer Naturforschung, Vol XIIIa, 1958, pp. 951-961. 9202874

ACSIL Tr 1190

The Diffusion of Uranium-233 in Uranium Oxide, by Roland Lindner, Franz Schmitz.
GERMAN, per, Z fuer Naturforschung, Vol XVIa, 1961, pp 1373-1378. 9203644

AEC-Tr-5511

Selected Articles From the German Periodical Z fuer Physik.

2302 1117 3241	
Vol XXXV, 1926, pp 652-669. 9205002 Heat Motion in Solids and Liquids, by J. Frenkel.	AEC-UCRL-Tr-832(L)
Vol CXXVIII, 1950, pp 324-346. Supraconduction of Copper Sulfide, by W. Buckel, R. Hilsch.	*ACSI I-2493-A ID 2232439
Vol CXXXI, 1952, pp 420-422. Supraconduction and Resistance of Tin With Lattice Distortions, by W. Buckel, R. Hitsch.	*ACSI I-2493-B ID 2232439
Vol CXXXVIII, 1954, pp 432-435. A Crystal-Lattice Model, by R. Hilsch.	*ACSI I-2493-P ID 2232439
Vol CXXXIX, 1954, pp 328-345. The Influence of Lattice Distortions on Ultraviolet S 1f-Absorption of Potassium Iodide, by Fred Fisher.	*ACSI I-2493-C ID 2232439
Vol CXLII, 1955, pp 58-69. Superaconduction and Electrical Resistance of Vapor-Sprayed Bismuth Layers, by Nikolaus Barth.	*ACSI I-2493-D ID 2232439
Vol CXLIII, 1956, pp 591-604. The Structure of Thin Salt Layers - Condensed at Low Temperature - of 1st Alkali Halides, by Wilhelm Ruthl.	*ACSI I-2493-E ID 2232439
Vol CXLIII, 1956, pp 605-622. The Structure of Thin Salt Layers Condensed at Low Temperature - of 2nd Halides of Heavy Metals Cu, An and Ti, by Wilhelm Ruhl.	*ACSI I-2493-F ID 2232439
Vol CXLV, 1956, pp 141-150. Electron - Diffraction Photographs of Thin Metal Layers at Low Temperatures, by Hagen Bulow, Werner Buckel.	*ACSI I-2493-G ID 2232439
Vol CXLVII, 1957, pp 361-372. Measurement of the False - Order Energy of Bismuth and Gallium Layers at Low Temperatures, by Wilhelm Sander.	*ACSI I-2493-H ID 2232439

21 pp.

Selected Articles From the German Periodical Z fuer Physik. (Contd)

Vol CXLVIII, 1957, pp 646-652. Supraconduction of Vapor - Sprayed	
Lead Layers Admixed With Manganese, by	
Nikolaus Barth.	
Vol CL, 1958, pp 527-550. 9202875	
The Influence of Impurity Surface Films on	
Structural Changes of Thin Evaporated Metall	
Films During Annealing, by K. J. Hanszen,	

CLII, 1958, pp 495-506.	*ACSI I-2493-J
Roentgenographic Studies of Vapor-Sprayed	ID 2232439
Bismuth Layers at Low Temperatures, by	
Hans-Joachim Queisser.	

Vol CLIV, 1959, pp 474-485.	*ACSI I-2493-K
Hall-Effect of Bismuth Layers Condensed by	ID 2232439
Quenching, by Werner Buckel.	

Vol CLVII, 1959.	*ACSI I-2493
L. Structure and Resistance of Very Greatly	ID 2232439
Distorted Copper Layers at Low Temperatures,	
by Ernst Feldtkeller, (pp 65-78).	

- M. Measurement of the False-Order Energy in Quench-Condensed Copper at Low Temperature, by Winfried Monch, Wilhelm Sander, (pp 149-158).
- N. The Influence of Lattice Distortions on the Optical Properties of Metal Layers, by Jorg Hasse, (pp 166-188).

Vol CLVIII, 1960, pp 563-571.	*ACSI I-2493-0
Supraconduction of Vapor-Sprayed Lead Layers	ID 2232439
With and Admixture of Gadoliniusm, by	
Klaus Schwidtal.	

Vol CLIX, 1960, pp 125-148. 9203648 Absorption Spectrum and Zeeman Effect of Crystalline Dysprosium Salts at Low Temperatures, by G. Gramberg. *ACSI I-2493-I

ACSIL Tr 1221

ID 2232439

Photochemical Reactions of Some Aromatic Halogen Compounds, by Z. R. Grabowski. GERMAN, per, Z fuer Physikalishe Chemie, Vol XXVII, No 3, 4, 1961, pp 239-252.

*AERE Harwell

The Electron Spectra of 3, 4-Benzcinnoline. Observation of a π*-->n-Fluorescence, by E. Lippert, W. Voss.
GERMAN, per, Z fuer Physikalische Chemie, Vol XXXI, 1962, pp 321-327.

*AERE Harwell

Dependence of the Photoelectric Current on the Concentration of F-Centers in the Case of the X-Rayed NaCl Crystals, by Emery Tarjan, Rudolf Voszka, et al.
HUNGARIAN, per, Magy Fiz Folyoirat, Vol VIII, 1960, pp 21-30.

AEC-SCL-T-441

The Recrystallisation of Zinc by Thermal Cycling, by D. Buttinelli, G. de Gregorio. ITALIAN, per, La Motallurgia Italiana, Vol LII, No 12, 1900, pp 835-841. 9203067

AEC-NP-Tr-929

Electrolytic Heating. JAPANESE, rpt, 1963.

*FTI)-TT-63-416

Consideration of Measuring Conditions in Differential Thermal Analysis, by Buneski Kagaku.

JAPANESE, per, Japan Analyst, Vol XII, No 1, 1963, pp 26-32.

*AEC

Corrosion of Stainless Steel Tubes by Liquid Sodium Systems. I. Thermal Convectional Corrosion Testing Apparatus, by Hideo Atsumo. JAPANESE, per, Nippon Gershiryoku Gakkaishi, Vol IV, 1962, pp 94-99.

AEC-Tr-5378

Measurement of the Viscosity of Non-Newtonian Liquid by Means of the Falling-Sphere Method, by Masao Takada, Sadao Hirota. JAPANESE, per, Nippon Kagaku Zasshi, No 80, 1959, pp 956-959. 9204978

AEC-Tr-5617

Creation of D. O. P. Mistic Bodies and Their Removal, by Yoshitoshi Oyama, Yoichi Takashima, et al.

JAPANESE, per, Rikwagaku Keukyusho Hokoku, Vol XXXIV, Sep 1953, pp 330-338. 9204991

AEC-SCL-Tr-459

Tensile Test Diagrams for Wool Fibers and Their Mechanical Properties, by Edward Szucht. POLICH, per, Prace Instytutu Wlokiennictwa, Vol IX, No 2, 1959, p 39-58. 9204098

OTS 60-21577 PL-480

The Cauchy Problem for an Elastic Dielectric in a Magnetic Field, by S. Kaliski. POLISH, per, Proc Vibrat Probl Polish Acad Sci, Vol 11, No 3, pp 237-249.

*FTD-TT-63-365

Various Theories of Pressure in Cases, by Wladysław Gosiewski.
POLISH, per, Towarzystwo Jauk Scislych w Paryzu Pamietnik, Vol V, No 2, 1874, pp 1-15. 9205000

AEC-UCRL-Tr-885(L)

Selected Articles From the Rumanian Periodical Comunicarile Academici Republicii Populare Romine.

Vol VI, No 2, 1956. Application of Three-Symbol Logic to the Theory of Automatic Devices. II. Characteristic Equation of Polarized Rolay, by Gr. C. Moisil, (p. 251-234).

*AEC

Application of Three-Valued Symbolic Logic in the Theory of Automatic Devices. I. Realization of Fundamental Functions in the Circuit Design, by Marek Greniewski, (pp 225-229).

Vol VI, Ro 3, 1956, pp 505-508. Application of Three-Symbol Logic to the Theory of Automatic Devices, III. Circuits with Real Contacts, by Gr. C. Moisil.

*AEC

Vol VI, 30 4, 1956, pp 335-336. Application of Galoisian Fields in the Theory of Automatic Devices. IV. Three-Symbol Theory Applied to Polarized Belays, by Gr. C. Goisil.

*ALC

Vol VI, No 8, 1956, pp 971-973. Application of Three-Symbol Legic to the Theory of Automatic Devices, IV. Realization of Operating Functions in Real Action, by Gr. C. Poisil.

*AEC

Vol VIII, 1956, pp 1127, 1126. Application of Three-Valued Symbolic Logic to the Theory of Automatic Devices. V. Circuits P-1, by Gr. C. Moisil. *.\LC

Selected Articles From the Ukrainian Periodical Ukrain Fiz Zhur.

Vol V, No 3, 1960, pp 430-431.
Determination of the Degree of Ionisation of
Atoms in Crystal Lattices by the Electric
Transfer Method, by P. P. Kuz'menko, Ye. I. Khar'kov.

*AERE Harwell

Vol VI, No 1, 1961, pp 116-120. Determination of the Effective Charge of an Impurity in a Metal by the Residual Electric Resistance, by P. P. Kuz'menko. *AERE Harwell

Vol VII, No 2, 1962, pp 117-131. Mechanism of the Mobility and Effective Charges of Ions in Metals, by P. P. Kuz'menko. *AERE Harwell

Vol VI, No 4, 1961, pp 525-530. Electric Transfer of Slight Zinc and Silver Impurities in Solid Aluminium, by P. P. Kuz'menko. *AERE Harwell

Vol VII, 1962, pp 602-617.
Deuteron Splitting Under the Action of Nuclear Forces, by A. M. Korol'ov.

*AEC

Vol VII, No 9, 1962, pp 1003-1014. Influence of External Magnetic Field on Operation of Cesium-Vapor Converter, by N. D. Morgulis, Yu. I. Chutov.

*FTD-TT-63-351

Vol VII, No 12, 1962, pp 1350-1354. Electric Transfer of Antimony in Aluminium, by P. P. Kuz'menko, V. S. Koval'chuk. *AERE Harwell

Scientific Miscellaneous

Trends in Scientific Research in 1963 in Affiliates of Academy of Sciences USSR, by V. O. Ruzhitskiy, 7 pp. RUSSIAN, per, Byul Tekh Ekon Informatsii, No 10, 1962, pp 69-71. JPRS 18300 The Theory of Labor Productivity and Problems in the Development of Science and Technology, by G. A. Shaumyan, N. E. Bauman, 14 pp. RUSSIAN, per, Iz Vysshikh Ucheb Zaved - Mashin, No 9, 1962, pp 5-14. JPRS 18478 It has Been Accomplished, by V. V. Parin, 9 pp. RUSSIAN, per, Smena, No 7, 1961, pp 3, 4, 9679880 FTD-TT-62-1607 Decree on the Specialization of Scientific Workers, BULGARIAN, np. Durshaven Vestnik, No 23, 22 Mar 1963. JPRS 18702 A Comparison of Old and New Programs of Russian-Chinese Machine Translation Systems, by Liu Yung-ch'uan, Kao Tsu-shun, 37 pp. CHINESE, per, Chung-kuo Yu-wen, No 10, 1962, pp 439-458. JPRS 18332 Tushino 1961, Our Comments, 5 pp. CZECII, per, Letecky Obzor, No 8, 1961, p 268. FTD-TT-62-1701 Cybernetics in Municipal Transportation, by G. Potthof, 14 pp. GHRMAN, per, Deutsche Eisenbahn Technik, No 1, 1963, pp 7-12, 40. JPRS 18596 Outstanding Chemical Engineering Achievements of Budapest Tochnical University Over the Past 15 Years, by Miklos Polgar, 13 pp. HUNGARIAN, per, Magyar Kemikusok Lapja, Vol XVII, No 11, 1962, pp 488-493. JPRS 18403 Work Conference on the Problems of Mathematical Linguistics and Machine Translation, by Gyorgy Szepe, 7 pp. HUNGARIAN, per, Magyar Tudomany, Vol VII, No 8, 1962, pp 521-525. JPRS 18292 The Basic Concept of Biometry and Its General Application, by Ireneusz Juvancy, 17 pp. HUNGARIAN, per, Magyar Tudomany, Vol VII, No 11, 1962, pp 683-696. JPRS 18392 Report of the Korean Academy of Sciences.

JPRS 18534

KOREAN, per, Choson Minjujui Inmin Konghwaguk

Kwahakwon T'ongpo, No 1-4, 1962.

Scientific Miscellaneous (Contd)

Aims and Cooperation Tasks of the Academies of Sciences of Socialist Bloc Countries, by Henryk Jablonski, 16 pp.
POLISH, per, Nauka Polska, Vol X, No 4, Jul-Aug 1962, pp 8-18.

JPRS 18215

The Advantage of One-Layer Cognitive Learning Systems, by O. G. Ivakhnenko, 13 pp. UKRAINIAN, per, Avtomatyka, Vol VII, No 6, 1962, pp 10-19.

JPRS 18406

A Learning System With Utilizes Statistical Decision Functions, by S. F. Kozubovs kyy, 16 pp. UKRAINIAN, per, Avtomatyka, Vol VII, No 6, 1962, pp 60-64.

JPRS 18406

Activities in the Ukrainian Academy of Sciences, 22 pp.
UKRAINIAN, per, Dopovidi Akademiyi Nauk Ukrayins'koyi RSR, No 7, 1962, pp 970-975.

JPRS 18466

INFORMATION RECEIVED DURING APRIL ON COVER-TO-COVER TRANSLATIONS

Akusticheskii Zhurnal, Vol VIII, No 3, 1962.	Amer Inst of Phys Sov Phys - Acoustics Vol VIII, No 3
Avtomaticheskaya Svarka, No 5, 1962.	BWRA
Avtomatika i Telemokhanika, Vol XXIII, No 9, 1962.	ISA
Byulleten Eksperimental'noi Biologii i Meditsiny, Vol LIII, No 1, 1962.	СВ
Doklady Akademii Nauk SSSR, (Chemical Technology Section), Vol CXLIII, CXLIII, No 1-6, 1962.	СВ
Doklady Akademii Nauk SSSR, (Mathematics Section), Vol CXLVII, No 1-6, 1962.	Amer Math Soc Sov Math - Dok Vol III, No 6
Doklady Akademii Nauk SSSR, (Physics Section), Vol CXLVI, No 1-3, 1962.	Amor Inst Phys Sov Phys - Dok Vol VII, No 9
lilektrosvynz, No 9, 1962.	AIEE
Geokhimiya, No 3, 1962.	Geochem Soc
Geologiya Nefti i Gaza, Vol IV, No 8-A, 8-B, 1960.	RRG
Geomagnetizm i Aeronomiya, Vol I, No 3, 1961.	AGU
Izmeritel Tekhnika, No 9, 1962.	ISA
Izvestiya Akademii Nauk SSSR, Seriya Fizicheskaya, Vol XXVI, No 4, 1962.	СТТ
Kauchuk i Rezina, Vol XXI, No 4, 1962.	RAPRA
Kinetika i Kataliz, Vol III, No 3, 1962.	СВ
Koks i Khimiya, No 9, 10, 1962.	CTRA
Kolloidnyi Zhurnal, Vol XXIV, No 3, 1962.	Св
Liteinoe Proizvodstvo, No 9, 1962.	BCIRA
Optika i Spektroskopiya, Vol XIII, No 6, 1962.	OSA
*Priborostroyeniye, No 10, 1962.	Taylor & Francis Ltd.

ISA

Pribory i Tekhnika Eksperimenta, No 3, 1962.

्राप्तिक वि क्रिक के स्थापिक सम्बद्धा कर है। ———————————————————————————————————		
The state of the s	to the second se	
Radiotekhnika, Vol XVII, No	9, 10, 1902.	AIEE
Stal, No 12, 1962.		BISI
Svarochnoye Proizvodstvo, N	0 4, 5, 1962.	BWRA
Tsvetnye Metally, Vol III,	No 2, 1962.	PS
Uspekhi Matematichoskikh Na	uk, Vol XVII, No 3, 1962.	Cleaver-Hume Press
Voyennyy Vestnik, No 11, 19	62.	ACSI I-0424-K ID 2191530
Zhurnal Eksperimental'noi i Vol XLIII, No 3, 4, 1962.	Teoreticheskoi Fiziki,	Amer Inst of Phys Sov Phys - JETP Vol XVI, No 3, 4
Zhurnal Neorganicheskoi Khi	mii, Vol I, No 3, 1956.	AEC Tr-4584
Zhurnal Neorganicheskoi Khi	mii, Vol I, No 5, 1956.	AEC Tr-4586
Zhurnal Neorganicheskoi Khi	mii, Vol I, No 6, 1956.	AEC Tr-4587
Zhurnal Neorganicheskoi Khi	mii, Vol I, No 8, 1956.	AEC Tr-4589
Zhurnal Neorganicheskoy Khi	mii, No 5, 6, 1962.	CS
Zhurnal Tekhnicheskoi Fizik	xi, Vol XXXII, No 9, 10, 1962.	Amor Inst of Phys Sov Phys - Tech Phy Vol VII, No 9, 10

^{*}Table of Contents not available.
Table of Contents follows for the above cover-to-cover translations.

Soviet Physics ACOUSTICS

A Translation of "Akusticheskii Zhurnal"

(Russian Original Vol. 8, No. 3, pp. 255-379, July-September, 1982)

January-March, 1963

325

334

340

258

263

CONTENTS RUSS. PAGE PAGE 255 201 Calculating Amplification Factor in Inclined Incidence of a Sonic Wave on a Parabolic Reflector, T. S. Belle, V. M. Gorbunkov, and L. D. Rozenberg...... 273 Coherent Scattering of Sound from Clusters of Discrete Inhomogeneities in Pulsed 281 Emission, V. P. Glotov Amplitude and Phase Fluctuations of a Sound Wave Reflected from a Sinusoidal Surface. 285 223 Ĕ, P. Gulin Statistical Characteristics of Sound Signals Reflected from the Undulating Sea Surface, 228 202 On the Attenuation of Sound as it Propagates through the Atmosphere. 301 I. A. Dneprovskaya, V. K. Jofe, and F. I. Levitas 235 308 An Ultrasonic Density Meter. A. A. Isaav and A. S. Khimunin 240 Ultrasonic Absorption in a Three-Component System. O. A. Kapustina...... 314 249 320

B. F. Kur'yanov

Coefficient, I, V, Lebedeva

Available From Amer Inst of Phys Sov Phys - Acoustics Vol VIII, No 3

The Scattering of Sound at a Rough Surface with Two Types of Irregularity.

Reverberation Chamber Techniques in the Measurement of Acoustic Absorption

An Ultrasonic Method of Observing the Behavior of Dislocations in NaCl Crystals,

Vol. 8, No. 3, pp. 201-302

AKUSTIGHESKII ZHURNAL Vol VIII, No 3, 1962 CONTENTS (continued)

	PAGE	RUSS. PAGE	
In Installation for the Precipitation of Zinc Oxide Aerosol Particles in a Low Frequency			
Acoustic Field, V. I. Nikitenko and V. I. Turubarov	289	370	
Acasuring the Power of Blastic Vibrations Applied to a Load. L. I. Teumin	291	372	
CHRONICLES			
G, Rusakov (In Honor of His 60th Birthday),	293	374	
BIBLIOGRAPHY			
Statistical Architectural Acoustics, by L. Cremer	295	376	
Books, Brochures, and Authors' Abstracts on Acoustics Published in 1961-1962	296	377	
Sov Phys - Acoustics			
Vol VIII, No 3			

AVTOMATICHESKAYA SVARKA No 5, 1962 C 0 N T E N T \$

		nge nbers
SCIENTIFIC AND TECHNICAL		
A decatron programming device. B. E. Paton, V. S. Gavrish and Yu. S. Grodetskii	1	(1)*
The weldability of 30KhSHVFA hardenable steel sheet by two-run argon tungsten-arc process, welding from one or both sides. S. L. Mandel'berg and V. G. Gordonnyi	4	(5)
High temperature austenitic steels, alloys and melds alloyed with 0.3-1.5% of boron. B. I. Medovar, L. V. Chekotilo, V. A. Lutsyuk-Khudin, N. I. Pinchuk and L. G. Puzrin	8	(9)
Features of heating during electron-beam welding. N. A. Ol'shanskii	16	(18)
Features of the flash butt welding of hot semi-finished products. S. i. Kuchuk-Yatsenko and V. T. Cherednichok	21	(25)
Inductances of secondary circuits of resistance welding machines calculated. L. V. Glebov	26	(31)
Corrosion resistance of melded joints in mild and low alloy steels in alkaline media improved. N. A. Langer, L. N. Yagupol'skaya, Z. V. Yushkevich, Yu. A. Koryagin and B. F. Lebadev	30	(38)
Droplet transfer of electrode metal during the electroslag remelting of large cross section electrodes. M. M. Klywev, V. Y. Topilin and E. V. Voinovskii	37	(44)
DISCUSSION		
The problem of calculating the strength of components of welded structures. I. T. Trochun	41	(49)
INDUSTRIAL		
Modifications to the ABS welding head. N. E. Kokhanovskii	46	5 (55)
Investigation of diffusion welding with relation to vacuum electric devices. 1. V. Afanas'ev and A. F. Khudyshev	48	8 (57)
Experience of hardfacing rolling mill rolls. I. N. Aksenov	5	3 (64)
Available From British Welding Research Association		

Contents (Contd)	Page Humbers
Mechanised hardfacing of tran rail heads. Yu. A. Yzvenko and Yu. P. Gumenyuk.	56 (68)
The electrosisg welding of a cone crusher shaft. V. H. Khrundzhe and S. Ya. Shekhter	60 (72)
The electrosiag melding of the VTS—1 titanium alloy. S. M. Burevich, V. P. Didkevskii and N. N. Tikhov	84 (78)
The pressure melding of rolled aluminium-magnesium alloy sections. A. I. Shestakev and A. A. Rossoahinskii	69 (85)
An instrument for finding the purity of inert gases. V. T. Mashempa and V. I. Lakomskii	73 (89)
SCIENTIFIC AND TECHNICAL INFORMATION	
The electrosiag melding of the high chromium 10Kh14NDL steel. N. i. Kakhovskii and K. A. Yushchenko	75 (92)
A two-stage method of producing allver-carbon replicas for electron microscopy. 6. F. Darovskii	77 (93)
NEWS	
in the Coordinating Council for Welding	78 (95)
The Bureau of the Coordinating Council for Welding	79 (95)
A production/technical conference on the reconditioning of worn components by hardfacing. V. D. Piaklich and P. P. Rudometkin Available From British Welding Research Association	79 (96)

Automation and Remote Control

A translation of Automatika i Telemekhanika, a publication of the Academy of Sciences of the USSR

March, 1963 Vol. 23, No. 9 Russian Original Dated September, 1962 **CONTENTS** RUSS. A Nonlinear Problem in Optimum Control. The Problem, The Structure of the Optimal Control, and First Integrals. V. K. Lacy and V. V. Sonin 1117 1047 On the Solution of Certain Problems in the Theory of Dynamic Programming by Means 1130 of Electronic Analog Computers. Nguyen Than Bang 1060 1141 Equations of Markov Systems, Yu. P. Leonov 1071 Application of the Theory of Games to Some Problems of Automatic Control. II. 1144 1074 M. Yu. Gadzhiev 1084 1154 Algebraic Method of Determining the Optimum Transfer Function, A. N. Sklyarevich. . Methods of Correcting Dynamic Errors in Program Controlled Machine Tools, 1165 1093 Investigating the Dynamic and Statistical Properties of a Phase Shift System for Automatic Frequency Control for Quadratic and Combined Damping. 1179 Yu. M. Bakacy 1100 On Complete and Partial Autonomy of Multidimensional Linear Automatic Control 1113 1186 On Singular Control in Optimal Processes that are Linear with Respect to the Control 1202 Inputs, Yu, I. Paraev. Certain Engineering Methods for Analyzing Controlled Objects with Monotonic 1210 Transient Functions. L. A. Girshov, I. V. Gel'man, and I. A. Dobrin 1135 The Synthesis of Optimal Characteristics for Sampled-Data Servosystems. 1215 1140 1224 1149 Fast Sampled-Data Systems with Switching within a Cycle. R. S. Rutman...... The Minimization of Logical Functions of a Large Number of Variables, 1237 V. D. Kazakov. 1161 On the Choice of Initial Lags in the Optimization System Described in Reference [1]. 1166 1242 Simplified Analysis of the Processes of Multichannel Two-Position Control and a Certain Method for Correcting Them. A. I. Cherepanov 1170 1247 A Method for Coding Frequency Ratios in Automatic Devices. R. M. Trakhtenberg 1177 1254 Predictor Design, E. G. Zel'kin...... 1184 1260 1268 A List of Papers Devoted to Reliability Questions for the Year 1961. A. L. Raikin 1270 Available From Instrument Society of America

EXPERIMENTAL BIOLOGY AND MEDICINE

A translation of <u>BYULLETEN' ÉKSPERIMENTAL'NOI</u> <u>BIOLOGII I MEDITSINY</u>, a publication of the

Academy of Medical Sciences of the USSR
(Russian Original Dered January, 1962)

March, 1963 Vol. 53, No. 1, pp. 1-118 CONTENTS RUSS. PAGE PAGE **PHYSIOLOGY** The Influence of the Chemoreceptors of the Sinocarotid Region on the Coronary Circulation, 3 Reflex Regulation of Vascular Tone when the Brain is holated and Cooled, 7 Reflex Reaction of the Taste Receptors of the Tongue to Direct Stimulation of the Gastric Receptors, N. S. Zaiko and E. S. Lokshina 12 12 15 Changes in Some Physiological Indices of Salt and Water Metabolism in Persons Continuously Drinking Water with a High Mineral Content. I. A. Malevskaya and A. I. Bokina 17 PATHOLOGICAL PHYSIOLOGY AND GENERAL PATHOLOGY Antidromic Vascular and Pupillary Reactions in Rabbits Under the Influence of Radiation, L. D. Klimovskaya 22 The Biological Activity of Catecholamines in Rabbits at Various Intervals after Irradiation. A. F. Maslova The Influence of Drugs on Toxicity Acquired by Serum through Exposure to Ionizing Radiation, V. V. Alpatov and A. V. Shubina....... 28 The Influence of Pressor and Depressor Substances on the Greater and Lesser Circulations 31 Thermal Damage in Bums and its Relation to Plasma Loss. N. I. Kochetygov 37 Nonthermal Action of Microwaves on Cardiac Rhythm. Communication I. A Study of the Action of Continuous Microwaves, A. S. Presman and N. A. Levitina . Changes in Human Conditioned Reflexes Induced by Carbon Monoxide and by Vibration. The Influence of Acclimatization to Hypoxia on Experimental Epileptiform Seizures in Rats. 48 BIOCHEMISTRY AND BIOPHYSICS Daily and Seasonal Variations of Biochemical Blood Indices in the Lower Apes. 51 The Effect of Exercise on the Distribution of Glycogen and Protein in the Cardiac Muscle 56 Available From Consultants Bureau

BYULLETEN EKSPERIMENTAL'NOI BIOLOGII I MEDITSINY Vol LIII, No 1, 1962

CONTENTS (continued)

	PAGE	RUSS. PAGE
Time of Entry of Strontium-90 and its Elimination from Bone, Yu. M. Moskalev Changes of the Concentration of Sodium and Potassium Ions in Human Urine and Saliva During "Elevations" in a Barochamber to the Altitude of 5000 and 6000 m. A. S. Barer and E. V. Yakovleva	54 57	69 63
PHARMACOLOGY		
The Effect of GI "mine and y-Aminobutyric Acid on the Excitation Processes		40
in the Central Synapses. P. E. Dyablova	60 63	66 69
MICROBIOLOGY AND IMMUNOLOGY	-	
A Study of the Phagocytic Process in Vitro in a Culture of Bone Marrow Histiocytes.		
O. V. Chakhova and S. M. Sobolev	67	74
O. V. Bukharin	71	77
of Tetravaccine and Preventive Properties of Immune Sera. M. I. Alaverdyan	75	81
ONCOLOGY		
Leukemia and Cysts in Mice of the AFB Line, V. A. Parnes	79	86
EXPERIMENTAL BIOLOGY		
Changes in the Secretory Neurons of the Hypothalamus and Hypophysis Associated with Salt Loading, A. A. Voitkevich and G. A. Ovchinnikova On the Restorative Processes in an Ovary Subjected to the Action of Thio-TEF.	85	93
N. S. Artom eva and L. M. Farutina	90	98
(Rana temporaria L.). T. I. Polyakova	93	101
MORPHOLOGY AND PATHOMORPHOLOGY The Influence of Eserine on the Cerebral Cortex of White Rats. Communication II. Changes in the Neurones and in the Interneuronal Connections of the Rat Cortex		
Induced by Eserine. É. N. Popova	98	107
V. P. Bab mindra The Morphology of the Early Stages of Experimental Myocardial Infarct in	102	112
Atherosclerosis, E. F. Lushnikov and V. V. Suchkov	106	117
METHODS		
A Vascular Clamp for Temporary Arrest of Blood Flow During Chronic Experiments on Small Laboratory Animals. G. N. Arkhipov	111	122
Sh. S. Kiguradee	114	124

DOKLADY AKADEMII NAUK SSSR

PROCEEDINGS OF THE ACADEMY OF SCIENCES OF THE USSR

Chemical Technology Section

Volumes 142 and 143, Nos. 1-6

January-April, 1962

CONTENTS

VOLUME 142	PAGE	RUSS. ISSUE	RUSS. PAGE
Corrosion Inhibitors for Carbon Steel in Carbon Tetrachioride. S. A. Bales in	_	_	
and V. M. Chistyakov	. 1	2	416
The Upper Concentration Limit for the Propagation of Flame in Mixtures of Acetylene		_	
with Oxygen and Air, B. A. Ivanov and S. M. Kogarko	4	3	637
Subsolidus Structure and Ternary Compounds in the System CaO-ZrO ₂ -SiO ₂ .			
R. A. Kordyuk and N. V. Gul'ko	. 6	3	639
Characteristics of Hardening (Crystallization Structure Formation) Processes			
in Suspensions of Calcium Sulfate Hemihydrate at 20 and 60°. E. A. Amelina			
E. E. Segalova, and P. A. Rebinder	9	4	884
Mineral Formation at Contacts of Silicon Carbide with the Oxides of Iron and Calcium.			
I. S. Kainarskii and L.I. Karyakin	12	4	887
Modeling of Chemisorption Processes Taking Place in a Packed Column with Counter-			
Flow, N. A. Gol'dberg and V. I. Kucheryavyi	. 14	5	1134
Measurement of the Cation Transference Number in the Liquid Phase of Portland.		-	
Cement Clinker, P. P. Budnikov, I. I. Kholin and Z. B. Entin,	17	6	1342
The Kinetics of Lead Ferrite Reduction by Carbon Monoxide. D. M. Chishikov	• •	•	
and T. E. Konyshkova	. 21	6	1346
VOLUME 143		•	2010
Oxide Inclusions in Iron-Vanadium Alloys, V. A. Mchledlish vili			
and A. M. Samarin	. 25	1	159
The Effect of the Disproportion of Composition and of the Increase in the Yield	, o	•	100
of Pytolysis Products of a Fuel at Rapid Rates of Heating, Z. E. Chukanov			• • • •
A. P. Kashurichev and Ya. A. Stonans,	28	1	162
The Solubility of Tetravalent Lead and the Mechanism by Which it Dissolves.		_	
L. V. Vanyukova, M. M. Isacva, and B. N. Kabanov	32	2	377
The Theoretical Foundations of the Preparation of New Expanding Water-Impervious			
Preparations Based on Portland Coment. O. P. Mchedlov-Petrosyan			
and L. G. Filatov	35	2	380
Anodic Processes in the Electrolysis of the Salts of Monoesterified Carboxylic Acids.			
M. Ya. Fioshin and G. P. Girina,	. 39	2	384
The Reaction of Cuprous Sulfide with Zinc-Containing Silicate Melts.			
D. M. Chizhiko and S. S. Deineka	43	2	388
Some Sulfhydryl Compounds of Trivalent Iron, I. A. Kakovskii,			
E. A. Vershinin, and A. N. Grebnev	46	3	649
The Sorption of Alkali Metal Xanthates by Anion-Exchangers, I. N. Plaksin			
and S. A. Tetaru	50	3	653
The Study of the Liquid- Vapor Equilibrium for High-Boiling Mixtures at Pressures	• •		
other than Atmospheric, for the Case of the Cadmium - Zinc System.			
D. M. Chishikov, Yu. V. Tsvetkov, and V. M. Edel'shtein.	52	3	655
The Ordering of a Solid Solution Based on a-Mn. N. V. Ageav	J.	v	****
	. 55	4	922
and V. Sh. Shekhtman	. 00	•	744
AVALIANTE From Consultants Bureau			

DOKLADY AKADEMII NAUK SSSR (Chemical Technology Section) Vol CXLII, CXLIII, No 1-6, 1962

CONTENTS (continued)

	PAGE	RUSS. ISSUE	
Control of Westing Power of Polyethylene Films. A. A. Sinegub-Lavrenko The Kinetics of the Adsorption and Description of Acetone on Industrial Active Carbons.	58	4	925
Yu. D. Znamenskil and V. M. Kisarov	61	5	1156
Layers. A. S. Kolbanovskaya	64	5	1159
A. G. Pshenichnikov, and N. A. Shumilova The Extraction of Zirconium and Hafnium from Solutions Containing Nitric	68	6	1409
and Hydrochloric Acids. A. M. Resnik, A. M. Rosen, S. S. Korovin and I. A. Apraksin	72	6	1413

DOKLADY AKADEMII NAUK SSSR (Mathematics Section)

TABLE OF CONTENTS (November, 1962 - Vol. 3, No. 6 - Russian Original TOM 147 - Nos. 1-6)

	Original page nos.	Page
Boas, R. P.; and Rahman, K. I. (Rahman, Q. I.) Some inequalities for polynomials and entire functions.	(11–12)	1523
Volkov, E. A. Solution of boundary value problems for Poisson's equation in a rectangle.	(13–16)	1524
Gel'fand, I. M.; and Pjateckil'Sapito, I. I. Unitary representations in homogeneous spaces with discrete stationary groups.	(17-20)	1528
Kac, G. I. Finite ring groups.	(21-24)	1532
Konovalov, A. N. The fractional step method for solving the Cauchy problem for an n-dimensional oscillation equation.	(25–27)	1536
Ladyženskaja, O. A.; and Utal'ceva, N. N. The first boundary value problem for quasilinear second-order parabolic equations of general form	(28 –3 0)	1539
Minc, R. M. The character of certain types of complex equilibrium state in n-dimensional spaces.	(31-33)	1543
Slugin, S. N. Monotonic processes of bilateral approximation in a partially ordered convergence group.	(34-37)	1547
Teptin, A. L. The behavior of Green's function of a multi-point linear difference boundary value problem.	(38–40)	1551
Foht, A. S. Evaluation near the boundary of its domain of a polyharmonic function and its derivatives defined on a circle.	(41–44)	1555
Cencov, N. N. Evaluation of an unknown distribution density from observa-	(45-48)	1559
Cernikov, S. N. Conditions for local finiteness of single-layered p-groups.	(49-52)	1563
Semetkov, L. A. Imbedding theorems and maximal subgroups of finite groups	. (53-56)	1567
Vulih, B. Z. Linear structures equivalent to structures with a monotone north	m. (271–274)	1571
Gel'fand, I. M.; and Pjateckii-Šapiro, I. l. Unitary representations in a spac G/Γ, where G is a group of n-by-n real matrices and Γ is a subgroup of integer matrices.		1574
Gohberg, I. C.; and Krein, M. G. On factorization of operators in Hilbert space.		1578
Grigor'eva, I. A. A generalization of Bernstein's theorem on the form of non negative trigonometric polynomials to the case of an arbitrary number of relations between the coefficients.	•	1583
Kostovskii, A. N. The determination of strict inequalities between the mod- uli of roots in the transformation of algebraic equations by the Lobacev	•	
skii-Graeffe method.		1587
Kresnjakova, L. V. Regular functions with bounded mean modulus		1590
Maz'ja, V. G. On the solvability of the Neumann problem.		1595
Mamedov, R. G. The order and the asymptotic behavior of approximations to nondifferentiable functions by certain types of positive linear operators	. (297–300)	1598
Rusakov, S. A. On the imbedding of subgroups.		1602
	•	

DOKLADY AKADEMII NAUK SSSR (Mathematics Section) Vol CXLVII, No 1-6, 1962

Saul'ev, V. K. An example of the use of an imbedding theorem of S. L. Sobo-		
lev in numerical computations,	(303-305)	1604
Slugin, S. N. Complex semiordered space and modules over it	(306-309)	1607
Suprunenko, D. A. Periodic subgroups of solvable matrix groups	(310-312)	1612
Utal'ceva, N. N. Boundary value problems for quasilinear elliptic equations and systems with divergent principal part.	(313-316)	1615
Cistjakov, V. P.; and Markova, N. P. On some theorems for inhomogeneous	(317-320)	1619
Y	(321-322)	1624
Sut, M. G. A class of Markov processes whose exit probabilities are major-		1626
	(323-326)	
	(327–330)	1630
·	(519-522)	1635
Burago, Ju. D.; Maz'ja, V. G.; and Sapožnikov, V. D. Double layer potential for nonregular regions.	(523–525)	1640
Gelig, A. H. Stability of motion of systems with more than one equilibrium position.	(526-528)	1643
Gel'fand, I. M.; and Graev, M. I. Construction of irreducible representations	(529-532)	1646
Globenko, I. G. Convergence of variational processes.	(533-536)	1649
Gorčakov, Ju. M. Locally normal groups.	(537-539)	1654
Kiprijanov, I. A. A class of imbedding theorems with a weight.	(540-543)	
Landkof, N. S. Fourier transforms of certain classes of generalized func-	()40~)43)	1657
lions.	(544-547)	1662
Mihailov, V. P. On a boundary problem.	(548-551)	1665
Mysovskih, I. P. Cubature formulas for computing integrals over a hyper-		
sphere.	(552-555)	1670
Ponomarenko, V. G. Summation of Fourier integrals and best approximation		
by entire functions.	(556–558)	1674
Teterev, A. G. Extremum properties of solutions of elliptic equations	(559-561)	1677
Alekseev, V. G. Conditions for the orthogonality and equivalence of Gaussian measures in functional space.	(751–754)	1680
Aršon, I. S.; and Evgrafov, M. A. Growth of harmonic functions of three variables.	(755–757)	1684
Vitavet, L. M. Determination of minimal colorings for vertices of a graph by means of Boolean powers of the adjacency matrix	(758-759)	1687
Glazman, I. M.; and Skatek, B. Ja. On the discrete part of the spectrum of		
the Laplacian in limit-cylindrical regions.	(760-763)	1689
Gudiev, A. H. An imbedding theorem for restrictions as abstract functions.	(764–767)	1693
Il'in, A. M. On the fundamental solution for a parabolic equation	(?68771)	1697

DOKLADY AKADEMII NAUK SSSR (Mathematics Section) Vol CXLVII, No 1-6, 1962

CONTENTS (CONTD)	Original page nos.	Page
Keldy's, Ljudmila Imbedding of zero dimensional compacts in En	(772-775)	1701
Landkof, N. S. On the general theory of linear filters.	(776–778)	1705
Maslov, S. Ju. Transformation of arbitrary canonical calculi into canonical calculi of special types.	(779–782)	1708
Minc, G. E. An analogue of Herbrand's theorem for the constructive predi-	/702 70/\	
Cate calculus, /	(783–786)	1712
Proizvolov, V. Contractions of completely regular spaces,	(787–788)	1716
Rutman, M. A. Test for boundedness of solutions of linear partial differential equations with a leading term.	(789-792)	1718
Sabitov, I. H. Infinitesimal deformations of a convex surface with generalized sliding at the boundary.	(793–796)	1721
Sinai, Ja. G. Weak isomorphism of transformations with an invariant		
measure.	(797—800)	1725
Foht, A.S. Some estimates near the boundary of the region of a polyhar- monic function and its derivatives given on an N-dimensional domain	(801-804)	1730
Fridman, A. A. Degrees of insolvability of the word problem in finitely de- fined groups.	(805-808)	1733
Athangel'skii, A. Open and almost open mappings of topological spaces	(999-1002)	1738
Belinskil, P. P. Continuity of spatial quasiconformal mappings and Liou-	(777-1002)	1/36
ville's theorem.	(1003-1004)	1742
Berljand, O. S.; Nazarov, I. M.; and Pressman, A. Ja. in erfc- or a compos- ite Gauss-Poisson distribution.		1744
Birman, M. S. A test for the existence of wave operators	(1008-1009)	1747
Brodskii, M. S. Unicellularity of real Volterra operators	(1010-1012)	1749
El'In, M. I. A solution to a classical problem of oscillations.	(1013-1016)	1752
Zelenjak, T. I. A problem of S. L. Sobolev.	(1017–1019)	1756
Kagan, A. M. An empirical Bayes approach to the estimation problem	(1020-1021)	1760
Korobkov, V. K.; and Reznik, T. L. Certain algorithms for the computation	(1000 1004)	
of monotonic functions in the algebra of logic.		1763
Martenko, N. V. Continuation of an operator and the existence of fixed points.	(1026–1028)	1767
Matulis, V. A. Two versions of classical computation of predicates without structural rules of deduction.		1770
Minc, G. E. The differentiability predicate and the differentiation operator	(102) 1031,	1,,,
in constructive mathematical analysis.	(1032-1034)	1774
Redozubova, O. S. Pairs T of congruences with a constant distance and a constant angle between corresponding rays.	(1035–1037)	1777
Roman, Tiberiu Symmetries of border ornaments in a space of (n+1) dimen-		
sions.	•	1780
Cunihin, S. A. Decomposition of II-solvable groups into a direct product of subgroups.		1784
Aleksidze, M. Numerical solution of the Dirichlet problem for Poisson equations.	. (1271–1273)	1787
Available From Amer Math Soc	. (12/1-14/3)	1/6/
Sov Math - Dok		
Vol III, No 6		

DOKLADY AKADEMII NAUK SSSR (Mathematics Section) Vol CXLVII, No 1-6, 1962

Contents (Contd)	Original page nos.	Page
Andrunskievič, V. A.; and Rjabuhin, Ju. M. Special modules and special radicals.	(1274–1277)	1790
Džibašjan, M. M. Orthogonal systems of rational functions on a circle with a given set of poles,	(1278–1281)	1794
Ibragimov, 1. A. Stationary Gaussian sequences that satisfy the strong mixing condition.	(1282-1284)	1799
Kudaev, M. B. The use of Ljapunov functions for investigating the behavior of trajectories of systems of differential equations,		1802
Martynjuk, A. E. Solution of a fundamental boundary value problem for certain linear partial differential equations of even order.	(1288–1291)	1805
Plies, V. A. Conditional stability in critical cases.	(1292-1293)	1809
Rozenblat-Rot, M. The law of large numbers and the strong law of large numbers for inhomogeneous Markov chains. Hodžaev, L. Š. The operator of analytic prolongation of generalized func-	(1294–1295)	1811
tions	(1296-1299)	1813
Annual Index of Authors, Vol. 3, Nos. 1-6 (JanNov. 1962)		IXY

Soviet Physics

DOKLADY

A Translation of the Physics Sections of the Proceedings of the USSR Academy of Sciences
(Russian Original Vol. 146, Nos. 1-3, September, 1962)

ASTRONOMY A Positible Mechanism of Ejections on the Sun, V. S., Komel'koy,	Vol. 7, No. 9, pp. 779-868	. 7, No. 9, pp. 779-868 Mar		63
A Possible Mechanism of Ejections on the Sun. V. S. Komel'koy		PAGE		
FLUID MECHANICS An Estimate of the Dissociation Relaxation Time of Carbon Dioxide Gas in Experiments in Shock Tubes, T. V. Bazhenova	ASTRONOMY A Possible Mechanism of Ejections on the Sun. V. S, Komel'koy	. 779	1	58
Shock Tubes, T. V. Bazhenova	FLUID MECHANICS			
The Generation of Magnetic-Sound Waves in Conducting Liquids. S. V. tordanskii		. 783	3	554
MATHEMATICAL PHYSICS The Short-Wave Asymptotic Behavior of the Green's Function for the Region Exterior to a Finite Convex Region, V. M., Babich	The Generation of Magnetic-Sound Waves in Conducting Liquids. S. V. Iordanskii	. 786		
The Short-Wave Atymptotic Behavior of the Green's Function for the Region Exterior to a Finite Convex Region, V. M. Babich	* In the second of the second	. 789	3	561
Finite Convex Region, V. M. Babich				
MECHANICS Nutational Oscillations and Drift of a Synchronous Gyroscope Supported by Cardan Gimbals. S. A.Kharlamov		#40	•	
Nutational Oscillations and Drift of a Synchronous Gyroscope Supported by Cardan Gimbals, S. A.Kharlamov		, 792	3	571
S. A.Kharlamov				
Oscillations of a Tunnel Current in a Magnetic Field, V. G. Bar'yakhrar and V.I. Makarov. 799 1 63 Electrostatic Instability of a Plasma in a Strong Magnetic Field. A. A. Vedenov and E. P. Velikhov	, , , , , , , , , , , , , , , , , , , ,		3	550
Electrostatic Instability of a Plasma in a Strong Magnetic Field. A. A. Vedenov and E. P. Velikhov	PHYSICS			
Investigation of Multiatomic Molecules by the Intensities of Their Infrared Absorption Spectra. L. A. Gribov		. 799	1	63
Investigation of Multiatomic Molecules by the Intensities of Their Infrared Absorption Spectra. L. A. Gribov	•			
Spectra. L. A. Gribov		. 801	1	65
The Masses of Lutertum, Ytterbium, and Thulium Isotopes, R. A. Demirkhanov, V. V. Dorokhov, and M. I. Dzkuya	·	004		-
V. V. Dorokhov, and M. I. Dzkuya		. 804	1	88
Possible Determination of Additional Characteristics of an Unstable Particle. A. M. Pereiomov Shock Waves in a Rarefied Plasma in a Weak Magnetic Field. S. S. Moiseev and R. Z. Sagdeev. Resident of the Intensities of Combinational Scattering Lines with the Frequency of the Excitation Light. M. Ya. Taenter and Ya. S. Bobovich Degeneracy in Isotopic Spin and Hypercharge. A. M. Baldin and A. A. Komar. Absorption Spectra in the Light-Blue and Blue Regions of the Spectrum and Effect of Deformation in Thin Samples of Copper Monoxide. E. F. Gross, Chang Kuang-yin, and L. E. Solov'ev. B21 3 577 Drift Fluctuations in Nonhomogeneous Flasma in a Magnetic Field. B. B. Kadomtiev and A. V. Timofeev. 826 3 581 Angular Distribution of Fast Particles Reflected from the Surface of a Metal as a Result of Irradiation with an Ionic Beam. E. S. Mashkova and V. A. Molchanov. Sov Phys - Dok (continued)		808	•	79
A. M. Pereiomov Shock Waves in a Rarefied Plasma in a Weak Magnetic Field. S. S. Moiseev and R. Z. Sagdeev. 813 2 329 Variation of the Intensities of Combinational Scattering Lines with the Frequency of the Excitation Light. M. Ya. Taenter and Ya. S. Bobovich 816 2 333 Degeneracy in Isotopic Spin and Hypercharge. A. M. Baldin and A. A. Komar. 819 3 574 Absorption Spectra in the Light-Blue and Blue Regions of the Spectrum and Effect of Deformation in Thin Samples of Copper Monoxide. E. F. Gross, Chang Kuang-yin, and L. E. Solov'ev. 821 3 577 Drift Fluctuations in Nonhomogeneous Flasma in a Magnetic Field. B. B. Kadomtiev and A. V. Timofeev. 826 3 581 Angular Distribution of Fast Particles Reflected from the Surface of a Metal as a Result of Irradiation with an Ionic Beam. E. S. Mashkova and V. A. Molchanov. 829 3 585 Available From Amer Inst of Phys Sov Phys - Dok (continued)		, 800	2.	10
Shock Waves in a Rarefied Plasma in a Weak Magnetic Field, S. S. Moiseev and R. Z. Sagdeev. 813 2 329 Variation of the Intensities of Combinational Scattering Lines with the Frequency of the Excitation Light, M. Ya. Taenter and Ya. S. Bobovich 816 2 333 Degeneracy in Isotopic Spin and Hypercharge. A. M. Baldin and A. A. Komar. 819 3 574 Absorption Spectra in the Light-Blue and Blue Regions of the Spectrum and Effect of Deformation in Thin Samples of Copper Monoxide. E. F. Gross, Chang Kuang-yin, and L. E. Solov'ev. 821 3 577 Drift Fluctuations in Nonhomogeneous Flasma in a Magnetic Field. B. B. Kadomtsev and A. V. Timofeev. 826 3 581 Angular Distribution of Fast Particles Reflected from the Surface of a Metal as a Result of Irradiation with an Ionic Beam. E. S. Mashkova and V. A. Molchanov. 829 3 585 Available From Amer Inst of Phys Sov Phys - Dok (continued)		. 809	1	75
and R. Z. Sagdeev. 813 2 329 Variation of the Intensities of Combinational Scattering Lines with the Frequency of the Excitation Light. M. Ya. Tsenter and Ya. S. Bobovich 816 2 333 Degeneracy in Isotopic Spin and Hypercharge. A. M. Baldin and A. A. Komar. 819 3 574 Absorption Spectra in the Light-Blue and Blue Regions of the Spectrum and Effect of Deformation in Thin Samples of Copper Monoxide. E. F. Gross, Chang Kuang-yin, and L. E. Solov'ev. 821 3 577 Drift Fluctuations in Nonhomogeneous Flasma in a Magnetic Field. B. B. Kadomtiev and A. V. Timofeev. 826 3 581 Angular Distribution of Fast Particles Reflected from the Surface of a Metal as a Result of Irradiation with an Ionic Beam. E. S. Mashkova and V. A. Molchanov 829 3 585 Available From Amer Inst of Phys Sov Phys - Dok (continued)	Shock Wayes in a Rarefied Plasma in a Weak Magnetic Field. S. S. Moiseev		_	
Excitation Light. M. Ya. Tsenter and Ya. S. Bobovich 816 2 333 Degeneracy in Isotopic Spin and Hypercharge. A. M. Baldin and A. A. Komar. 819 3 574 Absorption Spectra in the Light-Blue and Blue Regions of the Spectrum and Effect of Deformation in Thin Samples of Copper Monoxide. E. F. Gross, Chang Kuang-yin, and L. E. Solov'ev. 821 3 577 Drift Fluctuations in Nonhomogeneous Flasma in a Magnetic Field. B. B. Kadomtsev and A. V. Timofeev. 826 3 581 Angular Distribution of Fast Particles Reflected from the Surface of a Metal as a Result of Irradiation with an Ionic Beam. E. S. Mashkova and V. A. Molchanov. 829 3 585 Available From Amer Inst of Phys Sov Phys - Dok (continued)	· · · · · · · · · · · · · · · · · · ·	, 813	2	329
Degeneracy in Isotopic Spin and Hypercharge. A. M. Baldin and A. A. Komar. 819 3 574 Absorption Spectra in the Light-Blue and Blue Regions of the Spectrum and Effect of Deformation in Thin Samples of Copper Monoxide. E. F. Gross, Chang Kuang-yin, and L. E. Solov'ev. 821 3 577 Drift Fluctuations in Nonhomogeneous Flasma in a Magnetic Field. B. B. Kadomtsev and A. V. Timofeev. 826 3 581 Angular Distribution of Fast Particles Reflected from the Surface of a Metal as a Result of Irradiation with an Ionic Beam, E. S. Mashkova and V. A. Molchanov. 829 3 585 Available From Amer Inst of Phys Sov Phys - Dok (continued)	Variation of the Intensities of Combinational Scattering Lines with the Frequency of the			
Absorption Spectra in the Light-Blue and Blue Regions of the Spectrum and Effect of Deformation in Thin Samples of Copper Monoxide. E. F. Gross, Chang Kuang-yin, and L. E. Solov'ev,			2	333
Deformation in Thin Samples of Copper Monoxide. E. F. Gross, Chang Kuang-yin, and L. E. Solov'ev,		, 819	3	574
and L. E. Solov'ev				
Drift Fluctuations in Nonhomogeneous Flasma in a Magnetic Field. B. B. Kadomtsev and A. V. Timofeev			_	
and A. V. Timofeev	This Electrosian is Narhamaganan Clauma in a Managan Mark III II I	821	3	577
Angular Distribution of Fast Particles Reflected from the Surface of a Metal as a Result of Irradiation with an Ionic Beam, E. S. Mashkova and V. A. Moichanov		. 826	3	581
Irradiation with an Ionic Beam, E. S. Mashkova and V. A. Molchanov		. 00	•	
Available From Amer Inst of Phys Sov Phys - Dok (continued)		900	•	
Sov Phys - Dok (continued)	Available From Amer Inst of Phys	., 049	3	983
Vol VII, No 9			(cor	ntinued)
	Vol VII, No 9			

DOKLADY AKADEMII NAUK SESR (Physics Section) Vol CXLVI, No 1-3, 1962 CONTENTS (continued)

	PAGE	RUSS. ISSUE	RUSS. PAGE
TECHNICAL PHYSICS			
Peculiarities of the Mechanical Characteristics of Copper and Silver Condensed in Vacuum. L. S. Palatnik and A. I. Il'inskii	832	1	79
V. V. Panasyuk and S. E. Kovchik	835	1	82
A Problem in the Collision of Plastic Bodies. F. F. Vitman and N. A. Zlatin The Formation of Faces on Germanium and Silicon Crystals Grown by the	838	2	337
Czochralski Method. D. A. Petrov, T. A. Rusakov, and S. K. Yacheva Design and Testing of Containers for Geophysical Investigations at Great Ocean	841	3	588
Depths. A. A. Semerchan and D. B. Balashov	844	3	592
THEORY OF ELASTICITY Proof of Dirichlet's Principle for the First Boundary Value Problem of the Nonlinear			
Theory of Elasticity. A. L. Krylov	847	1	54
and N. Yu. Shvaiko The Distribution of Elasticity Constants in Quasi-isotropic Polycrystals,	850	2	325
S. D. Volkov and N. A. Klinskikh	852	3	565
Stresses and Strains in a Cyclically Hardening Medium, V. V. Moskvitin	855	3	569
BIOPHYSICS Relation between Number of Receptors and Number of Independent Colors.			
V. K. Lyapidevskii Physicoche nical Properties and Hormonal Activity of Ultrasonically Irradiated Insulin.	859	3	696
I. E. Fi'piner and L. I. Stekol'nikov	862	3	700

TELECOMMUNICATIONS AND RADIO ENGINEERING

PART I: TELECOMMUNICATIONS

ELEKTROSVYAZ

NUMBER 9	1962
CONTENTS	
	Page
V. I. Tikhonov: Operation of Automatic Frequency Control in the Presence of Noise	1
V. G. Bondarenko: Single-Stage RC Oscillator with a Bridge Phase Invertor	12
V. I. Grigulovich: Synchronization of a Pulsed Oscillator Under Linear Conditions	24
M. V. Fomin and G. I. Rabinovich: Microwave Band-Reflectometer	32
N. G. Doryugin: Variation of Signal-to-Noise Ratio in the Image in Color Television Using Electronic Masking for Motion Picture Film	41
N. S. Kochanov: Compilation of Tables for Calculating Transient Response Curves of Electric Filters	54
K. Ye. Volkovitskiy and M. S. Shumilin: Calculating Vacuum Tube Coofficients with a Special-Purpose Computer	61
B. Ya. Lur'ye: On the Zoros of the Sum of Two Immittances in the Right Half-Plane	68
Brief Communications: N. A. Yerganzhiyev, P. M. Kopylov and V. A. Morozov: Monitoring Video Signal Lovol at Color	73
Television Stations	
Authors' Certificates	76
Foreign Patents	80
Bibliography	83 Engin



GEOCHEMISTRY

1962

GEOKHIMIYA

No. 3

CONTENTS

ONLENIO	
Komley, L. V., V. G. Savonenkov, S. I. Danilevich, K. S. Ivanova, G. N. Kuchina and A. D. Mikhalevskaya. Geological significance of regional rejuvenation of ancient formations in the southwestern part of the Ukrainian crystalline shield	219
Peninsula) Dmitriyev, L. V., R. P. Kotina and R. P. Moiseyeva. Variations in the composition of biotite and the conditions of its stability in granites of different petrochemical types as illustrated by the	233
Kalb massif (Contral Kazakhstan)	248
deposit	267
Gerasimovskii, V. I. and V. S. Rasskazova. Distribution of thallium in nepheline syenites of the Lovozoro massif (Kola Peninsula). Voskresenskaya, N. T., N. F. Titkova, N. S. Shulyakovskaya	275
and Chin Ts'ui-Ying. Geochemistry of thallium, rubidium and lithium in the magmatic process. Lisitsyn, A. E. and V. G. Khitrov. A microspectrochemical study of the distribution of boron in minerals of some igneous and	282
metamorphic rocks of the Middle Urals	293
some radial processes in the earth	306
mination by the lead isotopic method	309
BRIEF COMMUNICATIONS	
Slepnev, Yu. S. and G.B. Melent'yov. Distribution of tantalum and niobium in the rare metal granite pegmatites of the Sayan Mountains	321
NEWS	
Melitavri, G.N. Meetings honoring the tercentenary of the I. Franko State University of L'vov	327

GEOLOGIYA NEFTI I GAZA

PETROLEUM GEOLOGY

TABLE OF CONTENTS Vol. 4, No. 8-A, 1960

1.	Methods of geological exploration in the Peri-Gaspian depression. M. M. Charygin, M. P. Kazakov, and	
	Yu. M. Vasil'ev	139
2.	Oil-gas prospects of the Jurassic sediments of the Fergana depression. N. M. Rozanov, I. A. Shmelev,	
	and I. P. Sokolov	446
3.	Principles of compilation of tectonic maps of petroli-	
	ferous platform regions. D. V. Nalivkin p.	452
4.	Problem of reservoirs of the West Siberian Lowland.	
	N. M. Kruglikov and G. P. Sverchkov p.	457
5.	Lithology and reservoir properties of the rocks of the Tyumen Formation of the southeast part of the West Siberian Lowland. T. I. Gurova, M. A. Kustenko,	
	and A K. Shilin	462
A	vailable From Review of Russian Geology	

GEOLOGIYA NEFTI I GAZA

PETROLEUM GEOLOGY

TABLE OF CONTENTS Vol. 4, No. 8-B, 1960

1.	Reservoirs of the Lower Cambrian sediments of the Irkutsk amphitheater. Ya. N. Per'kova and		
	E. N. Meshcherskaya	p.	467
2.	Gas and water occurrences in the Olkha formation in the Sayan mountains of the Irkutsk region.		
	I. N. Sulimov	p.	473
3.	Some structural features of the Sakhalin oil pools. V. Ya. Ratner	p.	477
4.	River seismic operations in the West Siberian Lowland.		
	A. K. Shmelev	p.	482
7.	sections in connection with calculation of reserves.		
	V. N. Dakhnov	p.	48
\v.	diable From Review of Russian Geology		

GEOMAGNETIZM I AERONOMIYA Vol I, No 3, 1961

TABLE OF CONTENTS

Lal. Dorman: Cosmic Rays and Geomagnetism-A Review	265
A.D. Dantlov: Model of the Ionospheres of Venus and Mars	281
M.G. Antsilevich: Geomagnetic Field Variations on August 9, 10, 24, 25 and September	
1, 2, 1959, and March 11, 1960	286
Cosmic-Ray Intensity and of the Properties of the Corpuscular Current during the	
Magnetic Storm of July 1958	291
L.I. Dorman, A.I. Kus'min, G.V. Skripin: Sounding of Electromagnetic Conditions in	291
the Interplanetary Medium and in the Vicinity of the Earth	298
K. K. Fedchenko: On the Directional Anisotropy in the Mechanism of Forbush-Type	200
Decreases in Cosmic-Ray Intensity	310
G. M. Nikol'skiy: Photoelectrical Observations of Zodiacal Light Near Alma Ata	317
V. G. Istomin: Mass Spectrometric Measurements of Gas Composition of the Earth's .	
Atmosphere by Means of Rockets and Satellites	321
N. P. Ben'kova, Yu. S. Bonchovskaya, V. M. Shashum'kina: The Ionospheric Disturb-	
ances of 10-18 July 1989, from Observations of Soviet Ionospheric Stations	329
V. M. Polyakov, L. A. Shchepkin: Some Peculiarities in the Behavior of the F2 and F1	
Layers of the Ionosphere Above Irkutsk	334
V.B. Belyanskiy, G.A. Mikhaylova: Invostigations into the Properties of Atmospherics at Ultralow Frequencies (Below 1 Kc/s)	***
V. M. Mishin, G. P. Kalinovskaya, N. A. Mishina: Annual Variation of Magnetic Activity	339
According to IGY Data	347
R. G. Afonina: Review of Geomagnetic Activity in 1952-1959 and Some Differences Be-	341
tween Sudden-Commencement and Gradual-Commencement Magnetic Storms	354
V. M. Mishin, E. I. Nemtsova: Some Conclusions from a Comparison of Magnetic Dis-	441
turbances in the Northern and Southern Hemispheres	363
M. I. Pudovkin, A. B. Korotkin: Magnetic Bay Disturbances and Their Connection with	
Ionospheric Drifts	366
V. G. Dubrovskiy, R. N. Kuliyeva, K. Nepesov: Solar Diurnal Variations of the Earth's	
Electromagnetic Field from Observations at Ashkhabad	370
G.A. Fonarev: Variations in Marine Tollurio Currents	374
D. L. Finger, G.I. Kolomiytmeva, V.V. Novysh, G.M. Priyezzhev: Pilot Survey of the	
Earth's Magnetic Field with Magnetometers Towed Behind an Iron Ship	378
S. P. Burlatskaya, G. N. Petrova: Restoration of the Past Secular Variations of the Geo- magnetic Field by the Archeomagnetic Method	
N. K. Osipov: Computer Synthesis of Geomagnetic Data	383
A.L. Kudrevskiy: The Mass Production PM-1 Magnetometer	387 390
•	380
BRIEF INFORMATION	
Ya. L. Blokh, O. I. Inozemtseva, N. S. Kaminer, Yu. M. Kopylov, V. K. Koyava, A. V.	
Sergeyev: Variations in the Intensity of Cosmic Rays from November 12 to 15, 1960 .	394
N. N. Kulinov, N. E. Mikhayev: Ionospheric Observations during the Period of the Solar	
Eclipse of 15 February 1961	394
I.A. Zhulin: Contribution to the Problem of the Origin of Polar Geomagnetic Disturbances .	397
V. Kh. Leonov: An Instrument Based on Semiconductor Tricdes for Continuous Recording	
of Neutrons	398
CHRONICLE	
The Second International Symposium on Cosmic Space Research	40-
The First Plenary Meeting of the Soviet Geophysical Committee	400
Available From American Geophysical Union	404
AVRIJADJE ETOM AMETICAN GOODNOOLOOL INLOO	

Measurement Techniques

A translation of Izmeritel'naya Tekhnika, a publication of the Academy of Sciences of the USSR

(Russian Original Dated September, 1962)

1962, No. 9, pp. 711-804	April,	1963
CONTENTS		RUSS.
	PAGE	PAGE
Should the Definition of the Concept of Measurement Be Revised? P. N. Agaletskii	711	1
Measurement and its Essence. V. V. Varnello and Vanbo Pak	715	4
Concept of Measurement, A. G. Fleer	719	7
Process of Measurement, I. D. Fainerman	720	8
LINEAR MEASUREMENTS		
Instrument for Automatic Control of Dimensions of Articles with Discontinuous Surfaces.		
B. N. Markov and E. I. Ped'	722	9
Measurement of Small Holes by Means of the "Magic Eye." B. Ya. Verkhoturov	726	12
Internal Contact Gauge with Longitudinal Flexure Transducers, P. U. Markov	729	14
and L. A. Shabiti	731	16
Displacements Transducer with Electrical Recordings. V. V. Nikiforov	733	17
MECHANICAL MEASUREMENTS		
Universal Statescope for Testing Loaded Piston Manometers. A. I. Karpenko	735	18
V. Ya. Kozhukh and N. P. Ontshchenko	736	19
High-Speed Multirange Instrument for Measuring and Recording Pressure, V. 1. Korotich Device for Checking Uniformity of Rotation of Machine Drives. Yu. M. Andrushevich	739	22
and B. E. Bolotov	741	23
Sagging of Diaphragm Measuring Elements. E. N. Dranitsyn.	742	24
Dynamometer for Measuring Tensile Stresses in Cables, N. P. Kuchkina,	745	26
Determining the Zero Drift in a Bridge Strain-Gauge Circuit. L. Sh. Gorelik	746	27
Strain Gauge Which Automatically Eliminates the Effect of Bending the Sample,		
A. V. Gur'ev	747	27
R. V. Kazachkov.	748	28
Setting Device for Hydrometric Transducers, L. I. Vysotskii and A. M. Tuzhilkin	750	30
THERMOTECHNICAL MEASUREMENTS		
New Evaluations of the Thermodynamic Temperatures of Tin, Cadmium, Zinc and Gold		
Reference Points. I. I. Kirenkov, A. N. Gordov, K. S. Izrailov and U. V. Diikov New Methods of Producing the Thermodynamic Scale at Low Temperatures. A. D. Brodskil,	752	31
V. P. Kremlevskii, and A. V. Savateev	757	35
Reference Substances in Calorimetry	759	
Experimental Determination of the Constant C ₂ by Means of an Infrared Spectropyrometer,	198	36
V. E. Finkel'shtein and I. S. Romadanov. Reproduction of the Temperature Scale Reference Points by Means of Quadrupole Nuclear	761	37
Resonance, A. D. Brodskii and V. I. Solov'ev	763	39
	103	38
ELECTRICAL MEASUREMENTS High-Precision Magnetic Field-Strength Meter. G. V. Vaccia and E. F. Barranna	800	
High-Precision Magnetic Field-Strength Meter. G. K. Yagola and E. E. Bogatyrev	766	41
A. V. Kubarev	768	43
Available From Tratmumant Society of America	.00	40
AVAILAGUE PERM INSTRUMENT GREIPTVOT AMPTICA		

IZMERITEL'NAYA TEKHNIKA No 9, 1962

CONTENTS (continued)

	PAGE	RUSS. PAGE
Sifect of the Duty Factor of a Square-Wave Controlling Voltage on the Operation of a Synchronous Detector, G. A. Shtamberger	774	46
and E. V. Kovalenok,	777	48
TIGH AND ULTRAHIGH FREQUENCY MEASUREMENTS		
Checking the Pulse Characteristic of Noise Meters by Means of Short Radio Pulses.		
L. A. Pereverzev.	782	61
Measurement of the Frequency Drift Rate in Signal Generators. I. V. Matveev	786	54
NSPECTION OF MEASURES AND MEASURING INSTRUMENTS		
Wide-Scale Adoption of New Methods and Equipment for Production Measurements.		
G. N. Sharonov	788	56
veviews and reports		
Application of New Measuring Units in the German Democratic Republic, 1, A, Komarova	792	59
INFORMATION		
50th Session of the International Committee of Weights and Measures, G. D. Burdun,	795	61
Seminar on Measurement Techniques. S. I. Kuvshinov	798	63
FROM FOREIGN JOURNALS	800	63
Available From Instrument Society of Apprice		

IZVESTIYA AKADEMII NAUK SSSR, SERIYA FIZICHESKAYA Vol XXVI, No 4, 1962

TABLE OF CONTENTS	5 -	
	Pa; Orig.	g o Trans.
Line luminescence of activated crystals (Rare earth ions in MaF ₂ single crystals) - P.P.Feofilov	435	437
Excited energy storage and transfer in crystal phosphors	100	401
- V. L. Levshin	450	452
Investigation of phosphors by the method of electron paramagnetic		
resonance - V.V. Antonov-Romanovskii	460	462
Distinctive features of luminescence under the influence of an		
electric field - M.F.Fok	463	465
Pulse excitation of electroluminophors - A.M.Bonch-Bruevich	468	470
Photodielectric effect in electroluminescent zinc sulfide phosphore	5	
- F.I.Vergunas & K.Sh.Enikeeva	475	477
Crystal structure and spectra of alkali halide and ammonium halide		
phosphors - F.D. Klement	480	481
Electronic-vibrational processes in luminescence centers of ionic		
crystals - Ch.B.Lushchik, N.E.Lushchik & I.V.Yaek	488	488
Correlation between the luminescence and structure of some alkali		
halide phosphors - I.A. Parfianovich & E.I. Shuraleva	497	497
Absorption and emission of activator trapping centers in alkali		
halide phosphors - M.L.Kats	506	504
Candoluminescence from the standpoint of the Vavilov-Wiedemann		
criterion and present-day physical-chemical concepts - V.A.		
Sokolov	514	511
L'uminescence properties of luminophors as a function of their		
crystallo-chemical and physical-chemical nature -		
M.A.Konstantinova-Shlezinger	52 0	517
Disproportioning in the solid phase as a factor determining the		
ability of zinc sulfide type crystals to luminesce - A.A.Bundel		524
Phosphor research at the Moscow Electric Lamp Plant - R.A. Nilender		531
Closing address - V.L. Levshin	539	536
The significance of luminescence research in the light of the	-	
decisions of the Twenty-Second Communist Party Congress		
- V.L. Levshin	541	538
Available From Columbia Technical Translations		

Soviet Rubber Technology

No. 4

APRIL, 1962

"Kauchuk i Rezina"

Vol. 21

CONTENTS	Pa	lø å
Copolymerisation of unsaturated phosphorus-containing organic compounds. D. Sh. Korotkina, V. V. Vinogradova and G. G. Karelina	2	(1)
Effects of preliminary dipping of viscose cord on its properties and rubber-to-cord bond strength. T. V. Ionova, Z. I. Suleimanova and R. V. Usina	4	(3)
Petroleum resin softener for rubber stocks. E. Ya. Devirts. L. B. Tomchin and A. S. Novikov	8	(8)
Protection of rubbers and vulcanisates from catalytic oxidation by copper and iron ions. A. S. Kuzminskii, V. D. Zaitseva and N. N. Lezhnev	10	(10)
Vulcanizing systems for the production of heat-resistant butyl rubber vulcanisates. I. A. Levitin and G. M. Ronkin	14	(14)
Hent-resistant cellular dimethylsiloxane rubber. L. N. Kozlovskaya and N. I. Rudenko	18	(19)
Measurement of the slippage and friction of rubber stocks over metal under various conditions. A. I. Lukomskaya, L. F. Gudkova, S. B. Merezhannyi, P. N. Orlovskii and M. M. Reznikovskii	20	(21)
Stressing of the carcass of helically-reinforced pressure hose by internal pressure and axial force. V. I. Treshchalou and V. A. Lepetov	25	(25)
ECONOMICS AND ORGANISATION Economic effect of the introduction of new methods at tyre works. V. I. Yushkavich	29	(31)
EXCHANGE OF EXPERIENCE Automatic measurement of the thickness of rubber sheet. G. I. Margolis	32	(36)
Conversion of a horizontal bias-cutting machine to automatic control. B. M. Manulis	35	(40)
Belts for rope-drive conveyer systems. A. M. Shibakina and R. I. Olkha	38	(43)
Tensile machine with contact-free measurement of deformation and automatic recording of stress. Yu. S. Zuev, N. I. Kirshenstein and A. A. Matveev	39	(44)
Colorimetric determination of Nekal in rubbers. N. A. Isakova. A. M. Rakhmanina and Z. N. Orlova	42	(48)
Fractional method of determining pyrophosphate in a cyanide-free electrolyte for brase-plating. $E.\ A.\ Melamed\ and\ V.\ G.\ Kuzmina$	43	(69)
Annalable From Dubban and Mactice Personne Association		

KINETICS CATALYSIS

A translation of KINETIKA 1 KATALIZ,

a publication of the Academy of Sciences of the USSR

© 1963 CONSULTANTS BUREAU ENTERPRISES, INC. 227 West 17th Street, New York 11, N. Y.

Vol. 3, No. 3

May-June, 1962

CONTENTS	P A ENG. [Q 8
"Heavy" ions and the Thermal Equilibrium Ionization of Gases, I. K. Larin and	•	
V. L. Tal'roze	267	305
V. K. Ermolaev, Yu. N. Molin, and N. Ya. Buben	275	314
E. E. Nikitin	282	322
with Amino Acids. Ya. I. Turyan and B. P. Zhantalai	285	325
in Perchloric and Sulfuric Acid Solutions. L. A. Fedorova and		
E. A. Kanevskii	292	332
The Specificity of the Phenomenon of Catalysis. Ya. B. Gorokhovatskii Energies of the Bonds Between Carbon, Hydrogen and Oxygen Atoms in Organic Molecules and Anhydrous Yttrium Oxide, Calculated from the Heats of Adsorptive Replacement.	295	336
1. R. Konenko, A. A. Tolstopyatova, and V. A. Forapontov Study of Catalytic Oxidation of Hydrogen over Vanadium Pentoxide and Reduction- Oxidation of the Catalyst by the Gaseous Mixture Components, V. A. Roiter	298	339
and V. A. Yuza	302	343
V. V. Antuf'ev, M. P. Votinov, A. G. Savin, B. I. Sazhin, A. S. Semenova, and M. I. Leitman EPR Study of the Active Component of Chromium Oxide Polymerization Catalysts.	311	353
F. M. Bukanaeva, Yu. I. Pecherskaya, V. B. Kazanskii, and V. A. Dzis'ko	315	358
by Dehydrochlorination of Polyvinylidene Chloride. N. P. Keier and I. V. Astaf'ev	320	364
of Ethylene Oxide, Z, A, Markova	322	366
M. V. Tovbin and V. Ya. Zabuga	326	370
G. M. Panchenkov and A. M. Tolmachev	332	378
Available From Consultants Bureau		

KINETIKA I KATALIZ Vol III, No 3, 1962

CONTENTS (continued)

	PAGE	RUSS. PAGE
Autocatalytic Reaction Kinetics under Flow Conditions. A. P. Zinovieva and		
D. 1. Orochko	338	385
of Solution. V. T. Bykov and O. E. Presnyakova The Effect of Aluminum-Molybdenum Catalyst on the High-Temperature	345	39 3
Hydrogenation of 1,3,5-Trimethylbenzene, A. A. Krichko and L. S. Sovetova	350	399
System of Constant Gas Composition. A. L. Rozental' The Catalytic Action of the H-lons in Sulfocationites on the Dehydration	352	402
of Chlorietracycline in the Sorbed State, E. M. Savitakaya,		
T. A. Gracheva, and B. P. Bruns	360	411
T. A. Sladkova, and F. E. Englina	365	417
A. V. Kiselev, Yu. A. Él'tekov, and B. N. Semenova The Use of Frost's Equation for Calculating the Kinetics of Heterogeneous Catalytic	369	421
Reactions. P. Shnuider and A. Va. Rozovskii	374	427
and N. A. Sokolova	378	431
I, D. Morozova and V. V. Popovskii	385	439
BRIEF COMMUNICATIONS Adsorption of Benzene and N-Hexane and Their Liquid Solutions by 10X and 13X Zeolites.		
S. P. Zhdanov, A. V. Kitelev, and L. F. Pavlova LETTERS TO THE EDITOR	391	445
Action of Co ⁶⁶ γ-Radiation on Aqueous Pyridine Solutions, S. A. Safarev	395	449
S. A. Safarov and M. A. Proskurnin	396	450
DISCUSSION		
Stability of Exothermic Conversions in Stirred Flow Reactors. A. P. Zincy'eva Stability of Exothermic Processes, M. G. Slin'ko	397 406	461 460

No 9, 1962

CONTENTS

RAW MATERIAL FOR COKING: PREPARATION AND CONCENTRATION OF COALS . V.A. Letter and I.F. Lozanov. Raw materials for coking in the Ukraine 3 M.S. Elekhov and G.F. Neverrace. Investigation	Production of better quality commercial carbon disulphide
on the coal from the Moshchnyi seam of the Vorgashorsk deposit in the Pechora basin ?	M.M. Sorkin and R.R. Beyersheye. Prevention of corrosion and scale formation in primary
D.A. Nuchnik, Assessing the operating efficiency of blending machines	gas coolers
the moisture content of the charge in flow . 15	RECODUCTION ECONOMICS AND ORGANIZATION OF LABOUR
COKE PRODUCTION	G.A. Shverts. Operating experience at Zaporozhe
A.N. Bykov. Vertical shrinkage curves 19 V.I. Sukherukov. Quniting coke oven brickwork . 22 I.A. Turik, I.G. Glezer, N.A. Jonine, V.I.	CONSTRUCTICE, PLANT AND POWER
Novikova, S.A. Surovicev and V.K. Fonin. Improving the quality of foundry coke 23	P.E. Ouro and S.E. Kherkovskii. The design of bed plates for centrifugal pumps
L.A. Gerelov. The design of pitch-coke ovens 25 Ya. N. Begeslevskit, E.M. Kezinik and G.N. Mekarov. Temperature distribution in a circular oven for the continuous carboniz-	V.I. More now. Mechanization of the repair of naphthalene press filters
ation of coals	crusher electric motor
RECOVERY AND PROCESSING OF COKING PRODUCTS	information and nerr
M.S. Posin, S. Ye. Teret and I.I. Orekhov. Absorption of amonia from coke oven gas in apparatus operating under fosm conditions. 33	International system of units 50 D.D. Zykes. New book on gas purification 50
I.M. Khanin, M.B. Karteynel, V.I. Yakovlev, V.A. Portynenko and I.P. Bandarenko.	COKIE AND CHEMICALS IN OTHER COUNTRIES
Improving the process of benzole recovery . 37 L. Ya. Kelyandr, G.M. Fonenke and L.S. Starkova.	NNTI UNAINs. The Proabd refiner
Available From Coal Tar Research Asso	ciation

KOKS I KHIMIYA No 10, 1962 CONTENTS

RAW MATERIAL FOR COKING: PREPARATION AND CONCENTRATION OF COALS	1	I.I. Eru, A.A. Longe, E.M. Zeidlits and V.P. Strelnikova. Catalytic hydrogenation of quincline to produce the pesticide	
N. Ya. Levchenko and M. Ya. Khramova. Airlift- centrifuge unit	3 2	"kiuzol"	39
M.D. Shapiro and L.S. Alterman. Development of the plastometer method for the purpose		facilite reinforced with rods to protect chemical apparatus	41
of estimating the coking capacity of coals			
And charges	5 1	PRODUCTION ECONOMICS AND ORGANIZATION OF LABOUR	R
capacity from the yields of semicoking		I.M. Kothin and N.A. Samylin. The method of	
products	10	calculating the quality of the concen-	
E.B. Ivanov, A.S. Saulson, A.A. Belukha,	40	trate and the intermediate product	43
D. A. Muchnik and V. I. Kalchenko. Pre-		**************************************	
dicting the strength of coke	12	CONSTRUCTION, PLANT AND POWER	
G.D. Mauthin. From the Makeevka Coke and		,	
Chemical Works	17	S. Yu. Sipovich and Yu. I. Lunev. Electric wagon pushers at the Dnepropetrovak Coke	
COKE PRODUCTION		and Chemical Works	47
		V.D. Shumov. Rope guide pulleys on the grabs	
A.I. Voloshin, I.V. Virozub and V.V. Kazmina. Fuel consumption for carbonization and		of overhead coal loaders	48
methods of lowering it	18	INFORMATION AND NEWS	
K. G. Kalyanov. Sealing the gas-supply ducts			
on underjet coke ovens	21	A.R. Kuzmenkov and M.M. Kovalevskaya. The	
A.A. Azimov. The reliability of coke oven		work of the central coal-coke laboratory	
machines	23	at the Donetsk Coke and Chemical Works in	
N.G. Chen. Combatting the corrosion of coke		1962	60
quenching cars	27	From the works newspapers	51
RECOVERY AND PROCESSING OF COKING PRODUCTS		COKE AND CHEMICALS IN OTHER COUNTRIES	
K.P. Medvedev, V.M. Petropolekaya, K.A. Nikitina and L.M. Kharkina. Polyhydrio		 Persakhzon. Latest trends in the design and con -ruction of coke and chemical works 	
phenols from high-temperature carbon-		in the United States and Canada	53
ization	29	M. Feldbrin. Coal chemicals in Federal Germany	
P.P. Karpukhin and A.G. Nikitenko. Production		in 1960	55
of thiophen in benzoles by sulphonation		ENTI UKhina, New Koppors scientific research	
followed by hydrolysis	31	centre (United States)	55
M.K. Dyakova, N.A. Davtyan, M.N. Zharova,		AND INCOME. IN CONTRACT AND IN CO.	
Y. [. Avramenko and V.M. Karandasheva. Production of solvents from naphthalene-		CURRENT LITERATURE	
containing commercial cils	34	Yu. P. Gupalo and U. Ts. Andres, Review of the	
N.Y. Shorygina, A.G. Chernova and A.R.	JT	book by I.Z. Margolin "The cleaning of	
Derzhinskii. The production of phenan-		cosis and non-metallic minerals in heavy	
threne-phenol-formaldehyde resize	36	media"	56
Available From Coal Tar Research			•
WANTHOTE LLOW COST IST RESESTON	ABBOC	CLATION	

COLLOID JOURNAL

KOLLOIDNYI ZHURNAL

Volume 24, Number 3

May-June, 1962

CONTENTS

	PAGE	RUSS. PAGE
Activation of Wood Sulfite Pulp by Treatment with Surface-Active Substances,		
V. P. Babetin and R. A. Malakhov	215	249
V. I. Baranova and I. S. Lavrov	218	252
S. G. Mokrushin	221	256
Nature of the Ultrasonic Depolymerization of Silicic Acid Gel, N. S. Bubyreva Experimental Investigations of Laminar Systems, 28, Formation of Thin Ferric Hydroxide	223	259
Films on a Glass Surface, N. K. Bulatov and S. G. Mokrushin Preparation, Properties, and Electrophoresis of Lead Sulfide Sols, A. S. Voevodskii	227	263
and V. V. Ostroumov	231	268
Lyophobic and Lyophilic Sols, Yu. M. Glazman	237	275
Materials, S. S. Gusev and I. N. Ermolenko	239	278
Flow of a Viscoplastic Disperse System on a Rotating Cone. A. M. Gutkin	243	283
Photography. B. V. Deryagin, N. N. Zakhavaeva, S. V. Andreev, and Al M. Khomutov	248	289
V. A. Novikov, and A. I. Sidorov	253	293
And Yu. V. Shulepov	257	297
E. V. Tkachenko	262	303
V. N. Kuleznev and K. M. Igosheva	265	306
Two Adsorption Theorems. A. I. Russnov	268	309
D. M. Sandomirskii and I. D. Pil'menshtein	272	314
Interaction of Latexes with Electrolytes. D. M. Sandomirakii	277	320
V. K. Semenchenko	279	323
G. S. Khodakov, L. I. Edel'man, and G. G. Kornienko	286	332
Dilatancy of Cement Pastes, V. B. Chernogorenko and I. G. Grankovskii Sorption of Organic Cations on Substituted Forms of Clays, L. P. Shirinskaya and	390	337
N. F. Ermolenko	293	340
Gelatinization of Starch, M. S. Shull'man	296	344
B. Ya. Yampol'akii and Wu Shu-ch'iu	299	348
Available From Consultants Bureau	(0	ontinu ed)

KOLLOIDNYI ZHURNAL Vol XXIV, No 3, 1962

CONTENTS (continued)

	PAGE	RUSS. PAGE
ETTER TO THE EDITOR		
hase Potentials Arising during the Pressing of Solutions Out of Ion Exchange Resins. P. A. Kryukov and A. A. Zhuchkova	305	355
ergei Ivanovich Sokolov(On the Occasion of His 70th Birthday and the 40th Annivenary		
of His Scientific and Teaching Activity). A. G. Pasynskii and		
R. I. Fel'dman	306	357
vailable From Consultants Bureau		

Complete English Translation of Russian Foundry Journal Liteinge Proizvodstvo

russian Castings Produ**ction**

SEPTEMBER 1962

Automated pouring of molten iron O. M. Kryzhanovskii et al	•				397
Production of high-duty iron eastings 1. L. Kurbatskii et al					400
Calculation of gating systems for magnesium alloy castings V. D. Topo	roy				403
Stamping hammer cylinder eastings N. P. Pukhal'skii					404
Performance characteristics in steel tube and east iron pipe production B.	D. KI	iak ha	lin et e	al.	405
Exothermic heating of feeder heads for alloy steel ingot moulds L. G. S	aksor	iov et	al.		406
Semi-automatic machine for deburring cast turbine blades A. S. Polya	kov				407
Standard chamber ovens for moulds and cores S. I. Chetverukhin					408
Development and introduction of electronic level indicators for a found section A. S. Mekler et al.				on	411
Welded moulding boxes fabricated from rolled profile sections K. A. So					412
Bond between burn-on and easting K. I. Vashchenko and S. P. Doroshe	nko				413
Use of pneumatically controlled diaphragm valves in the Du-25 air distribute and $A,S,Fomin$	or ₽.	A. B	ogachi	kin	416
Calculation of feeders for shaped eastings N. G. Intyakov					418
On the theory of the graphitization process in white iron R. L. Snezhnoi	and i	E. G.	Titens	kii	420
Influence of modifiers and insoluble impurities on the crystallization of an elastic vibration field $V,E,Neimark\ et\ al.$	oismu	th an	d zinc	in .	422
Fluidity of ternary Ph-Sh-Sn alloys V. A. Kogan and A. A. Semionov					424
Pearlitic rim in ferritic east iron Ya. N. Malinochka					426
Exchange of experience:					
Improved technique for fluidity determinations Producing iron castings with a white skin in heated moulds Exhaust system for the 115 and 116 centrifugal mills Conveyerized electric furnace for drying core sand samples Large hollow cores in silicate-bonded mixtures Treating malicable from with boric acid Mechanized waste removal from the cupola well High-speed moisture determinations on moulding and core sands		•			429 431 432 433 433 433
High-speed moisture determinations on moulding and core sands Reconstructing a foundry melling section A new grade of stainless steel	:	:		•	434 434 435
Meeting on theoretical problems of pressure discusting N. D. Orlov		٠.			436
Results of the All-Union competition on metal economy A. I. Klauzen Available From British Cast Iron Research Associated					437

OPTIKA I SPEKTROSKOPIYA

naka Tarangan Manakan da sa kacamatan kecamatan da sa kacamatan da sa kacamatan da sa kacamatan da sa kacamata Barangan mengelah mengelah sa kacamatan da sa Barangan mengelah sa kacamatan da sa kacamatan

VOL. XIII, NO. 6

OPTICS AND SPECTROSCOPY

DECEMBER 1962

CONTENTS

(Numbers in parentheses are original Russian page numbers.

These Russian page numbers are also quoted at the head of each paper.)

The Probability of Nonadiabatic Transitions in the Case of Nondivergent Terms		
The Probability of Rolladiabatic Transitions in the Cape of Rollady of Bell 181 in E. E. Nikitin	431	(761)
The Relation Between Raman and Electronic Absorption Spectra		(200)
Effect of Solvents on the Intensities of Raman Resonance Doublets		(766)
Effect of Disubstitution on the Raman Lines of Monosubstituted Compounds		(775)
The Contours and Intensities of the Raman Lines of Xylenes		(778)
Frequencies and Intensities of the Planar Bending Vibrations of the C-H Bonds of Monosubstitution	443	(783)
Products of Benzene I. N. Khalimonova The Electron Paramagnetic Resonance Spectra of Some New Radicals	447	(791)
Study of the Association of Rhodamine 6G in Ethanol and Glycerol Solutions	449	(795)
The Association Nature of the Concentration Quenching of the Luminescence of Na-Fluorescein in	452	(801)
Aqueous and Glycerin Solutions V. L. Levshin and L. V. Krotova Solution of the Radiative Transfer Equation for the Case of a Highly Nonspherical Scattering Indox, II	457	(809)
A Spectrophotometer for the Far-Infrared Region.	463	(819)
V. N. Murzin and A. I. Demshina Colors and Absorption Spectra of Dyes Adsorbed on Light-Disporsing Materials	467	(826)
Effect of the Location of Stops on the Variation of Image Contrast	470	(831)
Miron Gaj	473	(835)
SHORT COMMUNICATIONS		
Monochromator With a Rotating Diffraction Grating for Ultrusoft X Radiation		
Effective Excitation Cross-Sections for Polassium Arc Lines.	480	(846)
Distribution of Spectral Line Intensities in the Hollow Cathode	482	(849)
The Nature of the Electron Trapping Levels in Silver Chloride Crystals	483	(850)
Separation of Active and Nonactive Absorption in the Long-Wavelength Region of Excitation of Lumi-	484	(852)
nescence	486	(854)
Raman Spectrum of Liquid 1,3-Butadiene	487	(855)
Yu. N. Panchenko, Yu. A. Pentin, V. I. Tyulin, and V. M. Tatovskii Luminescence of Zinc Sulfide Crystals Grown From the Melt	488	(857)
L. A. Sysoev, N. I. Krainyukov, B. S. Skorobogatov, and S. A. Sazonova Variation of the Degree of Depolarization of Raman Lines With the Frequency of the Exciting Light	490	(859)
Available From Optical Society of America	491	(861)

OPTIKA I SPÆKTROSKOPIYA Vol XIII, No 6, 1962

CONTENTS (CONTD)

Method for Recording Radiation Spectra of the Pulse Discharge with Time Resolution of 10 ⁻⁸ sec	492	(863)
Peculiarities in the Spectrum of Monodeuterobenzene	494	(865)
Relation Between the Rate of Decay and the Luminescence Yield Under Strong Excitation	495	(867)
Simplified Method for Calculating the Shape of Infrared Molecular Bands at High Temperatures	497	(869)
The Position of the Upper Electronic Level and the Oscillator Strength of the Optical Transition	498	(871)
V. N. Soshnikov Zeeman Effect in the Absorption and Luminescence Spectrum of CaF ₂ : Sm ^{**} and SrF ₃ : Sm ^{**} Crystals	500	(874)
B. P. Zakharchenya and A. Ya. Ryskin On Avalanche Processes in the Electroluminescence of ZuS-Cu	601	(875)
I. K. Vereshchagin and L. A. Kosyachenko Polarisation of the Quasilinear Luminescence Spectra of Perylene in the Electric Field at 77°K	503	(877)
G. V. Gobov, A. Z. Kalimbet, A. P. Fedotov, and G. D. Sheremet'ev	505	(879)
Verification of the Validity of the Kramers-Kronig Dispersion Relation in Dilute Solutions of Anthracene L. I. Al'perovich and V. M. Korovina Notes on the Article by O. P. Semenova and M. A. Levchenko, "Dependence of the Effective Ionisa-	506	(880)
tion Potential on the Concentration of Easily Ionized Impurities in the Arc Discharge"	507 508	(881) (882)
1963 Journals Published by the Academy of Sciences of the USSR	504	(,
Errata Letter to the Editor	479 479	(894) (894)
Author List, Vol. XIII	511 514	(886) (895)
Avedlable From Onticel Society of America		

Instruments and Experimental Techniques

A translation of <u>Pribory i Tekbnika Eksperimenta,</u> a publication of the Academy of Sciences of the USSR

Russian Original Dated May-June, 1962

1962, No. 3, pp. 425-620

February, 1963

CONTENTS		
	PAGE	RUSS. PAGE
Pulsed Light Sources (Review), L. S. Marshak	425	5
Capacitive Protection of the Accelerating Tube and Column in Electrostatic Generators		-
During Breakdown, V. Kh. Belyaev	441	22
Focusing Properties of Spiral Magnetic Quadrupole Lenses. Kh. A. Simonyan	446	27
Differential Measurements in Multichannel Spectrometers, A. A. Markov	450	30
A Mechanical Neutron Chopper Suspended in a Magnetic Field, S. M. Kalebin and		
V. V. Vladiminkii	455	36
A Pulse Detector for Resonance Neutrons of Energy 0.3 ev. I. F. Zhezherun, I. P. Sadikov,		
and A. A. Chernyshov	461	43
Depth Gauge for Investigating Emulsions. G. Bozóki and F. Tihany	465	47
Emergence of Bubbles and Distortion of Tracks in Bubble Chambers,		
Yu, A. Aleksandrov, G. S. Voronov, and N. B. Delone	467	50
Increasing the Efficiency of Gas-Discharge Spark Valves, I. I. Pershin	469	52
An External Standard as a Means of Determining the Efficiency and Background of a		
Liquid Scintillator. D. G. Fleishman and V. V. Glazunov	472	55
Shape of the Compton Spectrum of an Organic Phosphor, Yu. A. Tsirlin,		
L. N. Shishova, and G. A. Kibal'chich	475	59
Use of Plastic Scintillators in Beta-Ray Spectrometry, N. A. Bartanov, I. M. Rozman,		
Yu. A. Ryukhin, and Z. D. Chkuaseli.	477	62
Organic Crystals as Neutron Detectors, P. N. V'yugov, V. S. Dementii,		
S. S. Kalinichenko, and V. V. Taybul'skii	480	65
Plastic Scintillators of Maximum Emission in the 500 mu Region, G. A. Mikhal'chenko,		
G. F. Nichugovskii, and L. P. Rozhanovskaya.	481	66
Determination of the Concentration of Beta-Active Gases in Air. A. V. Elpidinskii and		
S. F. Roslik	485	71
Stabilization of the Gain of Scintillation Counters. A. V. Kulikov and Yu. M. Volkov	487	73
Recording of the Amplitudes of Pulses from a Large Number of Data Transmitters,		
I, D, Rapoport	489	75
Circuit for Shaping Short Pulses. O. S. Kolotov	493	79
Forming Current Pulses of Controlled Duration, V. L. Auslender, O. G. Il'in, and		
A. M. Shenderovich.	495	81
A Wide-Band Pulse Amplifier. B. A. Predein, V. M. Gorbachev, G. N. Sem'in,		
M. I. Filimonchev, and V. A. Shevtsoy	497	84
A Scaling Network Based on Tunnel Diodes, V. V. Izokh and M. K. Efimchik	500	86
A High-Voltage Pulse Generator Operating into a Capacitor Load, L. I. Minenko and		
V. P. Anokhin	501	88
Available From Instrument Society of America	(co	ntinued)

PRIBORY I TEKHNIKA EKSPERIMENTA No 3, 1962

CONTENTS (continued)

	PAGE	RUSS. Page
The Use of Perrites for the Generation of Powerful High-Voltage Pulses of Nanosecond		
Duration, S. I. Andreev, M. P. Vanyukov, and V. A. Serebryako:	502	89
Pulse Generator for Taking Probe Characteristics, N. I. Leont'cy and V. Ya. Yakovlev.	505	93
Measuring the Attenuation of an Electromagnetic Wave in a Super-High Frequency Pulse		
Discharge, V. N. Ponomarev	508	96
Measurement of Relaxation Times in Nuclear Quadrupole Resonance, I, A, Safin	511	98
Apparatus for Recording Proton Relaxation in Liquids in Weak Magnetic Fields.		
A. P. Stepanov.	514	102
A Galvanomagnetic Direct-Current Amplifier, N. I. Ovcharenko	518	107
Compact Electrometer Using Subministure Tubes. V. A. Kurilov	520	109
Constant Amplitude Phase Shifter, A. A. Meier and E. A. Soldatov	523	113
The state of the s	524	114
A. A. Frantsuzov	027	***
N. I. Ionov and V. I. Karataev.	529	119
The Omegatron as a Gage for Partial Pressures in High-Vacuum Systems. A. P. Averina	533	123
Detection of Beams of Neutral Molecules, V. B. Leonas	537	127
A Small Steam Ejector Vacuum Pump for a Capacity of 0,5 kg/hr. A. B. Treitlin	540	130
Apparatus for Obtaining Films by Vacuum Evaporation Technique, A. D. Grigor'ev,		
Yu. G. Mikhailov, N. M. Reinov, A. V. Rumyantseva, and A. P. Smirnov	543	133
Selection of an Optimum Supply Mode for the FEU-33 and FEU-36, Yu. Ya. Tel'nov and		
V, V. Yakushin,	545	136
A Two-Channel Electron Multiplier. L. I. Andreeva and B. M. Stepanov	548	138
Stabilization of the Radiant Flux of SVDSh-250 Mercury-Vapor Lamps. L. A. Rusinov The Television Method for Increasing the Brightness and Contrast in an Electron Microscope.	551	141
Yu, V, Chentsov and V, N, Vertiner	557	148
Device for Fine Pulverizing of Specimens, B, S, Tul'chinskii and A, G, Zhukov	559	150
Rheogoniometer with a Freely Suspended Disc and Continuous Recording for Structurized	000	100
Colloidal Systems and Polymer Solutions. A. S. Morozov, G. G. Petrzhik, and		
	562	153
A. A. Trapeznikov	566	157
Measurement of Periodic Magnetostriction Deformations, V. E. Kuznetsov and V. U. Usatov.		
Plotting of the Resonance Deformation Curve for a Piezoelectric Vibrator, B. I. Pirozhkov Stand for UHF Measurements of Dielectric Materials in Free Space, D. I. Mirovitskii and	569	160
V, F. Dubrovin	570	162
Device for Measuring the Thermal Expansion of Solids in the 20-1000°C Interval.		
V. E. Mikryukov and I. K. Kamilov.	581	173
Investigation of the Thermal Conductivity of Solids in the Interval from 80 to 500°K.		
I, K, Kamilov	583	176
Diaphragm Manometer Based on a Mechanotron Micrometer, S. G. Berlin,	587	180
Apparatus for Investigating Spectra and Kinetics of Photoconduction in Semiconducting	•••	-00
Crystals, A. F. Piotnikov, V. S. Vavilov, and B. D. Kopylovskii	590	183
Electrodeposition of Indium on Germanium, V. M. Kochegarov, D. I. Zaks and		
V. D. Samuilenkova	594	187
Use of Toluene-Argon and N-Heptane-Argon Mixtures as Fillers for Pulsed Ionization		
Chamben, V, F, Mikhailov	596	189
Target-Rotating Device. Yu. S. Alpat'ev and N. I. Chipal	598	191
Recording of ESR Spectra from Materials Exposed to X-Rays, D. I. Naryadchikov,		
A. D. Grishina, and N. A. Bakh	599	192
A Method for Modulating the Output Voltage of Photomultipliers, L. N. Gavrilenko,		
G, G, Lebed', and D, A, Nazarov	600	193
Available From Instrument Society of America	(co	ntinued

PRIBORY I TEKHNIKA EKSPERIMENTA No 3, 1962

CONTENTS (continued)

	PAGE	RUSS.
ceneration of Intense Pulsed Magnetic Fields in Small Volumes, O. Ya. Savchenko	601	194
Yu. A. Klyunv	802	195
and V. K. Rubtsov	604	197
A Simple He [®] Cryostat, B. N. Esel'son, B. G. Lazarev, and A. D. Shvets	605	198
NEW INSTRUMENTS		
Pulse-Type Cathode-Ray Curve Tracer for Checking Translator Volt-Ampere Characteristics	607	200
Type ÉAS Rapid Analyzer	608	201
Electron-Optical Tachometer	608	201
Type MPTM-1 Miniature AC Bridge	609	202
Instrument for Controlling Scaling Apparatus,	609	202

Available From Instrument Society of America

TELECOMMUNICATIONS AND RADIO ENGINEERING

PART II: RADIO ENGINEERING

RADIOTEKHNIKA

1962	VOLUME 17	NUMBER 9
	CONTENTS	
		Page
E, V. Zelyakh: D of Equivalent	esign of Electric Circuits by the Meth	od 1
	C.A. Tarasova: Two-Unit Broadband ave Antenna with Aperiodic Reflector	
geneous Lines	and V. I. Soshnikov: Synthesis of Hete by Solution of the Inverse Sturm-Liou	iville
	Internal and External Feedback in Teers	
G. M. Krylov: Approximation Passband	periodic Nonlinear Amplifier with State	ble 34
	nd A. G. Zhuravlev: Operation of Sync High Noise-Level Conditions	
	n Estimate of the Region in Which Mat or Vacuum–Tube and Solid-State Ampl	
	Optimum Detection of a Radar Signal wing Channels are Used	
	: Some Features of Instantaneous Vol	
All-Union Scient	ific Session Devoted to Radio Day	73
Odessa Scientific Radio Day	Technical Conference Commemoration	ng ••••• 78
New Books		81
Available Fro	om American Institute of Ele	etrical Engin

TELECOMMUNICATIONS AND RADIO ENGINEERING

PART II : RADIO ENGINEERING

RADIOTEKHNIKA

962 VOLUME 17	NUMBER 10
CONTENTS	
•	Page
7.A. Vol: The Effect of Conversion of Periodic Signals by Sampling on the Signal-to-Noise Ratio	1
D.G. Vendik: Determining the Mutual Impedance Between Antennas by known Radiation Patterns in the Far Field	8
N.D. Bulatov and V.G. Serebryakova: Some Results of Radio Observations During the Solar Eclipse of February 15, 1961	
A.G. Dem'yanchenko, S.1. Evtyanov: A Frequency Divider of a Converter and Amplifier	
V.P. Mandrazhi, D.A. Novik: Certain Properties of Digital Television Systems with a Changoable Frequency of Lines and Framos	
V.N. Briunin: The Diffusion Capacitance of the P-N Junction Junction Diodes	
Briof Communication	51
K.A. Reznik: Statistical Expressions for the Characteristic and Parameters of Two-Electrode Tubes	
A.I. Fyurstenborg: Comparison of Fixed Frequencies by the Interpolation Oscillator Method	
All-Union Scientific Session in Celebration of Radio Day (Continued from Issue No. 9)	71
Convention of the American Institute of Radio Engineers	82
New Books	83
Available From American Institute of Electric	ical Engine

STAL in English

No 12, 1962

TABLE OF CONTENTS

909 New tasks for the iron and steel industry

IRONMAKING

巻の他の一般の一般のである。これのは、これのは、これのできない。これのできないできないできない。これのできない。これのできないできないできない。これのできないできないできない。これのできないできないできないできない。これのできないできないできない。これのできな

- 12 Production of fluxed sinter using a high-basicity sinter as the flux V. Ya. Miller et al.
 15 Improving the size grading of sinter S. V. Bazilevich and B. L. Lazarev
 19 Automatic control of the rotating distributor A. L. Berin
 1922 Effect of incomplete filling of a blast-furnace on the temperature, composition, and static pressure of the gases V. V. Politavets
 1925 Choice of charge size in relation to blast-furnace volume when designing skip holsts N. S. Grekova and V. K. Gruzinov
 1926 Wear of blast-furnace stacks A. A. Cherepivskii and A. M. Skrebtsov
 1927 Research at works laboratories and institutes

STEELMAKING

- STEELMAKING
 927 Top pouring steel under slags V. A. Efimov et al.
 931 Effects of the grain size grading of metal powder on the properties and lives of open-hearth furnace hearths V. A. Bron
 934 Large capacity shaft kilns for kilning limestone 1. P. Stantsel'
 936 Effects of metal bath composition during the boil on the hydrogen content of steel V. I. Baptizmanskil et al.
 939 Improvement of the surfaces of plate ingots of chromium-nickel-molybdenum steel E. V. Abrosimov et al.
 940 Research at works laboratories and institutes

ROLLING AND TUBE PRODUCTION

- 941 Rolling beans using a universal stand S. V. Makaev et al.

 945 Analysis of the development of sheet mills abroad M. L. Zaroshchinskii

 948 Analysis and calculation of the shape of sintered carbide tube drawing dies

 1. M. Iunienskii et al.

 951 Rational roll pass design for economical window frame sections and the mechanization

 of laborious operations on the small section rolling mill G. M. Paviovskii and I. A. Krupnik

 955 Trends in the reconstruction of tubernilis N. F. Ermolaev

 956 Built-up blades for cutting cold sheet metal A. P. Ajana'sv

 957 Conference for coordinating engineering in rolling and tube production 1. M. Makeev

 958 Research at works laboratories and institutes

METAL WORKING AND HEAT TREATMENT

- 960 Effect of arsenic and phosphorus on the properties of 08kp rimming steel for deep drawing

- D. A. Litvinenko
 166 investigation of seamless rolled railway wheels and ways of prolonging their service life D. S. Kazarnovskii and N. A. Vekser
 168 Efficiency of welding up closed shrinkage pipes in killed steel ingots A. V. Vishnyakov et al.
 171 SKhL steel deoxidized with increased quantities of titanium G. V. Kvyatkovskaya
 172 Research at works laboratories and institutes

ECONOMICS AND ORGANIZATION

- 974 Potential reductions in production costs at iron- and steelworks S. V. Lazarev et al. 977 Potential improvements in labour productivity in the operation of blast-furnaces
- A. A. Logovatovskil

 979 Research at works laboratories and institutes

HEAT TECHNOLOGY

- 980 Centralized automatic control of the thermal conditions in regenerative blooming mill soaking pits M. M. Kotrovskil and G. Ya. Geller
 983 Operation of a continuous furnace with uncooled hearth supports K. M. Pakhaluev et al.

- 985 Research at works laboratories and institutes

Available From British Iron and Steel Institute

SVAROCHNOYE PROIZVODSTVO No 1, 1962

CONTENTS

	Pag Num	e bera
HOT CRACKING IN WELDED JOINTS		
Editorial	1	(1)*
The technological strength of metals while crystallising during welding. N. N. Prokhorov	1	(1)
The relationship between physical microheterogeneity and hot cracking in welds. B. A. Movchan	9	(6)
The temperature range in which hot cracks develop when single phase nickel alloys are fusion welded. N. Kh. Shorshorov and Yu. V. Sokolov	14	(9)
Effects of the composition and structure of chromium-nickel steels and alloys on hot cracking in the HAZ. M. Kh. Shorshorov, Yu. V. Sokolov, A. V. Russiyan, A. P. Matenev and N. I. Kurkina	20	(12)
Intergranular cracks in the heat affected zone when welding austenitic steels and alloys. B. I. Medovar, L. Y. Shekotilo, N. I. Pinchuk and V_{\bullet} A. Lutsyuk-Khudin.	33	(17)
The development of hot cracks in the heat affected zone during welding. B. F. Yakushin.	39	(21)
Comparison of certain methods of assessing the technological strengths of aluminium alloys during melding. G. M. Yakushina, O. V. Meshkova and B. F. Yakushin	43	(23)
Deformations in the weld metal while crystallising during automatic welding. i. M. Zhdanov	48	(26)
The problem of determining deformations which develop while metal is solidifying in the brittle temperature range. V. S. Ignatieva and Yu. Y. Subbotin	53	(28)
Errors in the theory of the technological strengths of metals while crystallising. V. S. Gavrilyuk and M. N. Popova	57	(30)
The ultrasonic method of investigating the conditions under which hat cracks form during welding. V. M. Zabolotskii	60	(32)
Elimination of cracking in the weld crater when welding aluminium alloys by argon tungsten arc process. A. G. Simonik and I. V. Yavulo	63	(34)
*The figures in parentheses denote the page on which the article begins in the Russian issue. Available From British Welding Research Association		

SVAROCHNOYE PROIZVODSTVO No 4, 1962

CONTENTS (CONTD)

CONTENTS (CONTD)		
Hot cracking in welds in containers made of AMg6 alloy. Yu. A. Lavrenov	65	(35)
EXCHANGE OF EXPERIENCE		
Centralised supply of CO ₂ to welding points. E. S. Voinov	69	(36)
Stack cutting using lom-pressure oxygen. V. P. Shevchenko, L. S. Sapiro and A. S. Glushchenko	71	(38)
The pinion of a 4500 mill repaired by electrosiag welding. F. D. Kashchenko	72	(38)
Modifications to the ASSh-2 machine. A. I. Fed [†] kin and A. M. Loshakov	74	(39)
NEWS		
Welding engineering at the USSR All-Union House of the National Economy in 1961. M. V. Khanapetov	74	(39)
The Lvov Conference on the mechanisation of welding processes. L. I. Zhukova	80	(43)
The conference of Voronezh melders. A. G. Koron and Yu. N. Zaitsev	81	(43)
A readers' conference at Volgograd. V. Yu. Sidorova	82	(44)
A readers' conference at Minsk. Ya. I. Rubin	83	(44)
The Xith International Congress of Welders in Czechoslovakia. K. V. Lyubavskii	84	(45)
The IIIrd International Congress of welders in the German Democratic Republic. V. S. Volodin.	86	(46)
BIBLIOGRAPHY		
Soviet literature on melding engineering Available From British Welding Research Association	88	(47)

SVAROCHNOYE PROIZVODSTVO No 5, 1962

CONTENTS

		ege mbers
Some further ways of integrating automatic and mechanised processes in welding production. V. S. Volodin	1	(1)*
SCIENTIFIC AND TECHNICAL		
Explosive welding. V. S. Sedkih, A. A. Deribas, E. I. Bichenkov and Yu. A. Trushin	4	(3)
The static tensile strength of welded joints with a soft interlayer. O. A. Bakahi and R. Z. Shron	9	(6)
The effect of the static characteristics of the arc and power source on the stability of the arc and of the arcing conditions. K. K. Khranov and E. M. Esibyan	16	(10)
Increasing fatigue strength and wear resistance in vibro-arc surfacing. V. S. Ibragimov	23	(13)
The use of local heating to atrengthen plate girders. G. K. Evgrafov and Y. O. Osipov	28	(16)
INDUSTRIAL - THE MECHANISATION AND AUTOMATION OF WELDING PRODUCTION		
Automatic welding of two-ply steel without edge preparation. D. P. Antonets and G. G. Psaras ${\bf r}$	33	(19)
Automatic welding of chemical plant in 1Kh18N9T steel. A. A. Makarenko	37	(21)
The introduction of mechanical melding methods at the Kaluga Mechanical Engineering Works. G. V. Sutyrin and Z. A. Nikol'skaya	43	3 (24)
Mechanised welding in the production of goods magons. V. I. Vasiliev	48	8 (27)
Mechanised welding at the Ivanov Peat Machinery Works. V. A. Asriy'ants	5	1 (28)
Semi-automatic submerged arc welding of titanium alloys. G. D. Nikonov	5	3 (30)
The automatic lighting of a gas flame. T. V. Bol'shakova.	5	7 (32)
The TS-17M tractor adapted for CO ₂ welding. E. A. Gotlib and G. V. Reznik	6	0 (34)
Automatic melding of bar stays in the repair of boilers. I. N. Egorov	6	2 (35)

The figures in parenthesis denote the page on which the article begins in the Russian issue.

Available From British Welding Research Association

SVAROCHNOYE PROIZVODSTVO No 5, 1962

CONTENTS (CONTD)	Page Numbers
Submerged are plug melding, using a PSh-54 semi-automatic machine. V. I. Leppel'	63 (36)
The preparation of defects in G13L steel castings prior to welding and its effect on weld quality. M. M. Timofeev	65 (37)
Experience in the welding of £1319L cast steel. 1. G. Gorin	69 (39)
NEWS	
Competition for mambers of the Kommonol (Communist Youth League) for the most significant contribution to the development of specialist and advanced welding production. V. S. Volodin	74 (44)
B I BL 10GR APHY	
Soviet melding inventions	75 (45)
Soviet welding literature	76 (46)
Available From British Wolding Research Association	

Tsvetnye Metally Non-Ferrous Metals	Table of Contents February, 1962	Vol. English	3, No. Transle	2 tion
The Operations of the	Non-Ferrous Metallurgical	Scientific		
and Technical Socie	ty During 1959-1961 and its	Tasks for		
the future in the L	ight of the Resolutions Made	s oh tue	1	(1)
The Indiverse of Comm	the CPSU, editorial	to Floter	•	(-/
december 4 this milk	ue Depressors in Xanthogena on Type Cils, by A. K. Livs	hits		
and A. S. Kualkin.	on type offs, by we we water		9	(9)
The Flotation of Pyro	chlore from Carbonatite Ore	s.		
by S. I. Pol'kin		-, 	12	(12)
Using Electromagnetic	Flowmeters to Measure the	Flow of Ore	•	
Pulps, by L. M. Kor	sunskii and I. R. Linetskii		. 16	(15)
Use of Secondary Powe	r Resources at the Ust'-Kam	enogorsk		
Lead-Zinc Combine,	by N. A. Stolyarevskii			(23)
Measuring the Tempera	ture of Exhaust Gases to Au	tomaticall;	7	
Regulate the Rato o	f Movement of Agglomerating	Machine	00	(00)
Pallets, by I.D. Re	znik, V.I. Bulgakov and M.K	. Saznenov.		(29)
A Hydrodynamic Method	of Modelling Fluidized Bed	Processes	27	(37)
by A. A. Rozlovskii	and a section of the	and of the same		()//
recurotogy for the pr	ectrolytic Refinement of Cr	ude iti en	./٦	(40)
The manufact the Assume	S. Golikov	the Project		(40)
ted Output of Flenr	ed Plants and Mines, by G.E). Kuanetso	v 45	(45)
The Heat Field of an	Aluminum Electrolyzer Catho	da, by M.	À	(/
Koroboy, A. M. Tavi	lakov and B. I. Timchenko		. 51	(49)
Improving the Control	Over the Electrolyte Compo	sition of		
	ers, by M. S. Beletskii		. 57	(56)
A Study of the Proces	ss of Sintering Electrolytic	: Niobium		_
Powder, by V. M. Ar	nosov,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			(60)
Design Diagrams for	the Relationships of Deforma	ation Resis	-	
	on and Degree of Deformation		,	
	Z. Ermanok		. 67	(66
The influence of Cer	tain Alloying Additions on	the Uxida-		/20
tion of Titanium,	by D. I. Lainer and E. N. S.	Lesareva		(70 :(77
	sandrov (1891—1962)		. /6	(()
	on the Exchange of Experience t Control at Non-Ferrous Me			
	ts, by V.V. Khvostenko and			(79
School-Seminar for O	re Dressers in the Gold Ext	racting	•	
	Baryshnikov		. 82	(80
Tenth Conference of	the Permanent Commission of	the Counci	•	•
of Mutual Economic	Help in the Fleld of Non-F	errous Meta	L 84	(82
	the Non-Ferrous Metallurgi		_	
fic-Technical Soci	aty		. 8	5 (83
Anniversary of Prof.	Dr. Tech.Sci. I.M.Verkhovs	kii	. 81	7 (84
"Planning and Operat	ing the Tailing Sections of	Ore Dres-		. ,
sing Plants," by P	.D. Evdokimov, reviewed by	L. Rubinchil		89
New Technical Litera	ture		. 9	88) 2
Extracting Copper an	d Silver by Segregation, by	A. Pen'ko.	9'	7 (91
Steel Production fro	m the Discard Slags of Copp	er Smelter	3,	. (04
ol . naragonskii	* * * * * * * * * * * * * * * * * * * *	* * * * * * * * * * *	. 10	2 (94

NOTE: Numbers in parentheses represent page numbers in Russian original Available From Primary Sources

USPEKHI MATEMATICHESKIKH NAUK

Volume 17 Number 3 May-June 1962

Russian Madhematical Surceys

TABLE OF CONTENTS

A. M. Il'in, A. S. Kalashnikov and O. A. Oleinik Second order Linear Equations of Parabolic type

1

S. K. Godunov

The problem of a generalized solution in the theory of quasilinear equations and ia gas dynamics

145

Published by the London Mathematical Society

Available From Cleaver-Hume Press

VOYENNYY VESTNIK No 11, 1962

TABLE OF CONTRICTS

		Page
I.	TRIULIPH OF THE IDEAS OF THE GREAT OCTOBER REVOLUTION	ı
ıı.	AT THE HIGHEST COMMAT READINESS by Chief Marchal of the Artillery, S. Varentsov	7
III.	MILITARY HONOR AND CONSCIENCE	12
	A. Corve the Motherland Conscientiously by Colonel N. Nikitich.	12
	D. Inner Enthusiasm by Ya. Davydov	14
IV.	DECIGIONS OF THE THEMTY SECOND CONGRESS OF THE COMMUNIST PARTY OF THE SOVIET UNION IN ACTION	17
	A. The Right Flank Battery in Competition by Col D. Milosordov	17
	E. From Line to Line by Lt Col A. Shkudov	19
	C. Work for the Good of Society by Major G. Karavayev (Ret'd).	24
٧.	TACTICS	25
	A. Independent Actions of Small Units by Lt Col L. Korzun, Candidate for Military Science	25
	B. Tank Company in a Forward Detachment by Col L. Kozlovskiy	28
	C. The Commander Modes a Decision for a March by Capt Kh. Ismailov, battalion commander	34
	Available From ACSI I-0424-K ID 2191530	

VOYENNYY VESTNIK

Tabl	.e o:	Contents (Cot'a)	Page
	D.	Mistakes Which Could Have Been Avoided by Col G. Ashin and Col P. Trifonov (Res)	38
	E.	The Use of Armored Curriers in the Mountains by Lt Col V. Ivoilov	42
	F.	Don't Forget Reconnaissance by It Col Yu. Isubimov	45
	Ģ.	What the Composition of a Chemical Reconnaissance Patrol Chould De by Major I. Grabovoy	46
	H.	The Company in an Advance Party	47
	ı.	The Lessons From One "Battle" by Capt G. Shtampfler	49
	J.	Mothodological Tactical Exorcise with Sergeants by Major Yanosh Vizi	51
VI.	TRA	UNING AND INDOCFRINATION	54
	A.	The Noble Character of the Soviet Soldier by Lt Col S. Yanovskiy	5 4
	₿.	The Results of Training Methods Courses by Col N. Fomin	59
	a.	Supervision of Military Training in the Company by It Col Cherkasov, Candidate of Pedagogical Sciences	64
	D.	Practical Skills are the Base of Training by Lt Col V. Folyokov, Corps of Engineers	66
	E.	Training for Jumps from High-Speed Airplanes by Guaras Lt Col V. Sheherbakov, Master of the Sport of Parachuting USSR	68
	F.	On the Training of Driver-Mechanics by Najor General V. Sedov	71
	G.	About New Problems and Obsolete Methods by Colonel A. Priyemchenko	76
	H.	Foreign Languages on Tactical Exercises by M. Bol'shakov	79
	I.	Voileys at Dawn by Major A. Dolgikh and Major G. Suilov	77
VII.	RC	CKETS, ARTILLERY AND AIR DEFENSE	લ્હ
	, A.	Prepare More Quickly for Upplanned Fire by Guards Col I. Remon!	ن £
	В	A Training Ground for Artillery Scouts by Col N. Vishryokov	şo
	C	The Study of Gyroscopic Instruments by Lt Col N. Tamanov	93
	A	vailable From ACSI I-C424-K ID 21,1550	

VOYENNYY VESTNIK No 11, 1962

Table of Contents (Cont'd)			Page
	D.	Target Assignment by Prepared Reading by Major I. Likhodoy	97
	E.	High Firing Preparation by Lt Col L. Glubochanskiy	100
	F.	The Operation of a Battery in the Mountains (from training experience) by Col A. Kozhovnikov	104
	G.	Technical Training Exercises by Lt Col A. Robrov	106
VIII.	SPA	SCIAL TROOPS	110
	A.	Planning Combat Training in a Company by Col P. Emol'yanov	170
	в.	How We Train Relief Drivers for Engineer Machines by Lt Col M. Zabusov, Capt V. Nevler	114
	0.	Operations of a Mobile Obstacle-Placing Detachment in the Mountains and Deserts by Capt M. Shteinberg	115
	D. E. F.	Capt D. Prokof'yov	118 120
	• •	Personnel by Major General V. Tolstyy, Signal Troops	122
	G.	In the Classroom as at the Radio Station by Col M. Zonis	124
	H.	A Training Methods Lesson with Sergeant Radio Operators by Col G. Kaptsevich	127
	I.	At Great Distances by Capt N. Rodin	129
x.	F	DRE AND WEAPONS	132
	A	. Necessary and Possible by Major A. Corlov	132
	ā	Training Tankmen in Firing from Concealed Firing Positions by Lt Col A. Sysoev	137
	C	Firing with Considerable Displacement by Guards Col 7. Slashehov	ديد
x	. T	HE CREATIVE CENIUS OF THE RATIONALIZERS	144
	A	. A New Method of Decontamination of Tanks by Guards Col I. Sukhomlin and Guards Senior Engineer-Lt V. Ponomarenko	14%
	E	The Straightedge for the PUO [Pribor upravleniye ognem; Artillery Director] has been Improved by It Col F.	
		Fedorov	.45
		A Bridge Ruler by Lt Col B. Gudel'man	1.3
	. 1	vailable From ACSI I-Ch2h-K ID 21/1530	

VOYENNYY VESTNIK

Tabl	e of	Contents (Concta)	Page
XI.	CRI	TICISM AND DIBLIOGRAPHY	151
	A.	A Chronicle of Outstanding Victories by Col M. Al'tgovzen, Candidate of Military Sciencies, Docent	151
	B.	New Books of the Military Publishing House	155
	c.	Physical Training and Sports - The Army Men are Ready for Hockey Battles by Honored Master of Sports and Honored Trainer of the USSR, A. Tarasov	157
	Λν	ailable From ACSI I-0424-K ID 2191530	

VOL XIIII, NO 3, 1962

CONTENTS	Page	Russ Refer	
Disintegration of Carbon and Oxygen Nuclei Induced by 15-29 MeV Protons	521	43;	737
Elastic and Inelastic Scattering of Protons by Ne ²² Nuclei P. V. Sorokin, A. I. Popov, V. E. Storizhko and A. Ya. Taranov Investighting of Electromagnetic Phenomena Involved in the Motion of Bodies in a Conduc-	529	43,	749
ting Fluid in a Magnetic Field	531	437	752
terium Molecules. J S. E. Kupriyanov, A. A. Perov, and N. N. Tunitski i Angular Distribution of Decay Products of A Hyperons Produced by 2.8-BeV/c, w. Mesons	539	43,	763
on Xenon Nuclei . I. A. Ivanovskaya, E. V. Kuznetsov, A. Prokesh, and I. V. Chuvilo Elastic Scattering of 5.45-MeV Protons by Mg Isotopes	541	43,	765
A. P. Klyucharev and N. Ya. Rutkevich Investigation of the Stripping Reaction on Nickel Isotopes	548	43,	7,75
M. V. Pasechatk and P. G. Ivanitskii A Rare Case of High-energy Nuclear Interaction with Isotropic Angular Distribution of the Secondary Particles	550	43,	777
K. I. Alekseeva, L. L. Gabuniya, Jen Phyong Soo, G. B. Zhdanov, and M. I. Tret'yakova Anisotropy of the Mössbauer Effect in &-Sn Single Crystals.	554	43,	783
N. E. Alokseevskil, Pham Zuy Hien, V. G. Spapire and V. S. Shpinel' Investigation of α Decay of Am ²⁴¹	559	43.	790
The Problem of the Accurate Menaurement of the Dielectric Properties of Ferroelectrics.	562	43,	3AP
at Microwave Frequencies	566	13,	800
a Pulse Discharge in Helium B. I. Andreev, M. P. Vanyukov, and 4 T. Starovoltov Resonance Scattering of Gamma Quanta by Sn ¹¹⁴ Nuclei	569	•3	804
Low-energy Photodeuterona from Lithium	672	431	808
A Study of AK ⁰ and K ⁰ K ⁰ Pair Production in x [*] D Interactions at 7-8 BoV/c	576	43	813
wang rung-thang, vil. vekster, it runn-than, E. N. Kladnitskaya, A.A. Kuznetsov, A. Mikhul, Nguyen Ting Tu, V. N. Penev, E. S. Sokolova, and M. I. Solov ev	57?	43	815
Comparison of the Effect of Electron Irradiation on the Optical Activity of Racemates and Optical Antipodes V. I. Gol'danskii and V, V. Khrapov	582	43	323
Asymmetry of Beta Radiation from Nuclei Pularized in an Alloy Containing Iron	586	43,	828
Determination of the Lifetime of a lligh-temperature Plasma by the Duration of Neutron Radiation Yu. V. Gott and V. G. Tel'kovskii	588	43,	831
Cascade o Particles from Carbon Nuclei Split by 660-MeV Protons	590.	43,	835
Paramagnetic Resonance of the Cr ³⁺ Ion in Spinel	693	43,	839
Probability of Ternary Fination of U ²³³ Induced by Rusonance Neutrons A. A. Panov	898	43,	841
Variation of the Electrical Resistance of Pure Metals with Decrease of Temperature. B. N. Aleksandrov and I. G. Dyakov	599	43,	947
Investigation of the Angular and Energy Distributions of Photoprotons from Heavy Nuclei	603	43,	852
Two-neutron and Three-neutron Transfer Reactions in Bombardment of Al. Cu, and Ta	609	43,	960
with N ¹⁵ and N ¹⁴ Ions V. V. Volkov, L. Pomorski, J. Tys, and G. N. Florov Search for μ-Meson Decay Anomalies in Paramagnetic M. tals	019	43,	865
Antiferromagnetic Properties of Some Percoakties.	619	13.	873
G. A. Smolenskii, V. M. Yudin, E. S. Sher, and Yu. E. Stolypin Screw Instability of a Toroidal Discharge in an Alternating Magnetic Field.	622	.3,	877
A. P. Babichev, A. I. Karchevskif, and Yu. A. Muromkin Possibility of Resonance Acceleration of Charged Particles by Electromagnetic Waves in a Constant Magnetic Field	625	43,	ø81
a Constant Magnetic Field V. Ya. Davydovskil Theory of Inelastic Atomic Collisions A. M. Dykhne and A. V. Chaplik	62(631	43, 43,	886
A Model of the Universal Weak Interaction. E. M. Lipmanov Threshold Absorption of Infrared Waves in Superconductors	634	43,	889 693
Anomalous Thresholds and Final-state Interaction	439	43,	ลก่0
Available From Amer Inst of Phys	643	44,	9.06
COMMENSAGE AND STREET AND COLUMN TANKS			

ZHURNAL EKSPERIMENTAL'NOI I TEORETICHESKOI FIZIKI Vol XLIII, No 3, 1962

Vol XLII, No 3, 1962		Due	-1
CONTENTS—continued	Page	Rus: Refe	
Calculation of Parameters of Experimental Spectra of Resonance Absorption of Gamma Quanta in Crystals	646	43,	909
B. A. Voklenko and I. V. Novobrantsev	652	43,	919 927
Transverse Pólarization of Cosmio-ray Muons V. S. Berezinskii Tomonaga-Schwinger Equation in the Bogolyubov Method A.D. Sukhanov	657 680	43. 43.	932
Ontical Potential of Heavy Nuclei Energy Loss Due to Radiation of Longitudinal Waves by a Charged Particle Moving in a	667	49;	942
Medium L. G. Naryshkina μ* Molecules A. A. Ansel'm and V. M. Shekhter Quasilinear Approximation in the Kinetic Theory of a Low-density Plasma	675 678	43, 43,	963 958
	682	43,	963
Theory of a Linear Antiferromagnetic Chain	685	43,	968
Mandelstam Dispersion Relations. V. l. Lend'el., Yu. M. Lomsadze, and B. M. Ernst High-frequency Magnetic Susceptibility of a Ferromagnetic Dielectric in a Longitudinal	689	43,	974
Magnetic Field	692	43,	977
Approximations included	897	43,	984
Aliguration of Androdectronis from the Architecture of Greenshov and A. I. Mikhallov	701	43.	991
The Two Modes of Nuclear Fission Yu. A. Selitskii and V. P., Eismont	710	43.	1005
Muon Energy in Cosmic-ray Muon Beams	713	43.	1009
The Infrared Asymptotic Behavior of the Green's Function in Some Models of Quantum Field Theory	715	43,	1012
Microscopic Description of Collective Levels of Nonspherical Nuclei			
	721	43,	1021
Annihilation of Positrons in an ionized Gas	728	43,	1031
Semiolosed Worlds in the General Theory of Relativity,	732	43,	1037
Properties of a Rarofied Formi Gas with Attraction S. V. Maleev	738	43,	1044
Threshold Singularities in Pion-nucleon Charge Exchange Scattering L. I. Lapidus	745	43,	1053
A Note on Unrenormalizable Theories B. M. Barbashov and G. V. Efimov. Contribution to the Theory of the Normal Skin Effect in a Magnetic Field at Low Tempera-	748	43,	1087
tures	760	43,	1060
Vertex Parts of the Amplitudes for Direct Nuclear Processes 1. S. Shapiro Green's Function for Electrons in a Motal and Analysis of the Electron Spectrum	765	43,	1068
Theory of the Electron Energy Spectrum of Metals with a Bismuth Type Lattice	785	43,	1083
TEMPERE TO THE EDITION	769	43,	1089
Letters to the editor			
Doppler Effect in the Reflection of an Electromagnetic Wave from a Magnetization Wave in a Ferrite	778	43,	1102
Radiation Reflected from a Moving Plasma in a Current-carrying Semiconductor in a Mag- netic Field	779	43,	1104
The Low Temperature Specific Heat of Metals G. M. Eliashberg	780	43,	1105
Analysis of Energy Spectrum of Polarized Neutrons with the Aid of a Magnetic Field			
Concerning the Lifetime of Excited F Centers S. I. Pekar and Yu. E. Perlin	781 782	43, 43,	1107 1108
Instability of Carrier Drift in Solids and the Coherent Radiation of Phonons		10,	1100
A. A. Vedenov and E. P. Velikhov	784	43,	1110
On the Coulomb Excitation of A Particles D. V. Volkov	785	43,	1112
Production of * Photomesons at Angles of 25-36° in the 152-162 MeV Interval	786	43,	1113
Some Characteristics of a Generator (Laser) Using a Mixture of Helium and Neon	788	43,	1116
Regge Poles in Nonrelativistic Quentum Mechanics	788	43,	1117
An inverse to the * + \nu Decay in the Coulomb Field of a Nucleus			
Quantized Oscillations of the Quasistatic Conductivity of Bismuth in a Magnetic Field	790	43,	1119
The Tunnel Effect in Bulk Tin	791 793	43, 43,	1120 1123
The Heat Conductivity of a Crystal of Natural Magnetite at Low Temperatures V. L. Sedov, L. V. Solomatina, and L. N. Il'chenko	794	43	1125
Available From Amer Inst of Phys	104	10	1163
Sov Phye - JETP Vol XVI, No 3			
· ·			

230

ZHURNAL EKSPERIMENTAL'NOI I TEORETICHESKOI FIZIKI

Vol XLIII, No 4, 1962			
•	_	Ruse	
CONTENTS	Page	Refer	ence
Production of At ²⁸⁹ and At ²⁰¹ by High-energy Proton Bombardment of Bi and Pb B. N. Belyaev, N. S. Mal'tseva, V. N. Mekhedov, Ming Nam Buk, and R. A. Szymczak Fine Structure of Pu ²³⁹ Alpha Radiation	797	43,	1129
S. A. Baranov, V. M. Kulakov, and S. N. Belen kill Polarization of Gamma Rays from the Reaction Si ³⁸ (p, γ) P. M. Tutakin	801. 805	43. 43,	1135 1140
Kinetic Energy of Fragments as a Function of Alpha-particle Energy in the Ternary Flasion of Uranium Z. 1. Solov'eva and R. A. Filov	809	43,	1148
Anomaly in the Decay of µ" Mesons in Mesic Atoms of Iron-group Transition Metals L. B. Egorov, A. E. Ignatenko, A. V. Kuptsov, and M. G. Petrashku	811	43,	1149
Investigation of the Rotational Motion of Molecules of a Liquid by the Method of Nuclear	815	43,	1154
Magnetic Resonance			
Nuclear Magnetic Resonance in Concentrated Aqueous Solutions of VO**	818)	43,	1158
N. S. Kucheryayenko	822	43,	1164
The Superconducting Properties of Thin Aluminum Films	828	43,	1173
Ultrasonic Splitting of the Mössbauer Absorption Line in Sp ¹¹⁹ O ₂	833	4 3,	1179
Paramagnetic Resonance of Free Silver Atoms Trapped in Nonpolar Media at 77 K	837	43,	1184
R. A. Zhitnikov, N. V. Kolesnikov, and V. I. Kosyakov	839	43,	1186
Photoneutrons from In ¹¹⁸ É. S. Annahkina Angular Distributions of Pions Produced in Nucleon-nucleon Collisions and the Isotopic	847	43,	1197
Invariance Hypothesis Liu Min and Yu. D. Prokoshkin Polymorphig Transition in Sodium Chloride Under Pressure	851	43,	1202
V. V. Evdokimova and L. F. Vereshchagin	855	43,	1208
Azimuth Angle Distribution of Secondary Particles Produced in High-energy Interactions A. P. Mishakova and B. A. Nikol'skii	859	43,	1213
**-Meson Production in a Nuclear Coulomb Field V. V. Barmin, Yu. S. Krestnikov, E. V. Kuznetsov, A. G. Meshkovskii, Yu. P. Nikitin, and V. A. Shebanov	868	43,	1223
Effect of the Dimensions and Purity on the Electrical Resistance of Metals in a Longitud- inal Magnetic Field at Helium Temperatures	871	43,	1231
Organio Tin Compounda. A. Yu. Aleksandrov, N. N. Delyagin, K. P. Mitrofanov, L. S. Polak and V. S. Shpinol' Nuclear Breakup Reactions	879	43,	1242
	883	43,	1248
Phase Diagram of Cerium in the Range 20—350°C up to Pressures of 80 × 10 ⁵ kg/cm ²	887	43,	1253
L. D. Livshitz, Yu. S. Genshaft, and V. K. Markov Measurement of the Lifetime of the 4° Level (1282 keV) of the Cr ⁴¹⁴ Nucleus by the Res- onance Scattering Method.	894	43,	1262
	899	43,	1268
V. A. Atsarkin, É. A. Gerasimova, I. G. Matveeva, and A. V. Frantsesson	903	43,	1272
Polarization Effects in the Radiation Decay of Pions S. A. Gadzhiev and A. I. Mukhtarov	905	43,	1275
A Space-time Approach to Quantum Field Theory	909	43,	1281
Possible Decays of New Mesons	914	43,	1288
by Means of Dispersion Relations	920	43,	1296
Statistical Model of a Nucleus including Correlations . G. M. Vagradov and D. A. Kirzhnits	923	43,	1301
Stable Betatron Oscillations in a Nonlinear Magnetic Field	928	43,	1308
Inversion Splitting of Levels in Free Complexes of Transition Metals I. B. Bersuker Temperature Equilibration Rate for Charged Particles in a Plasma	933	43,	1315
R. R. Ramazashvill, A. A. Rukhadze, and V. P. Clin	939	43.	1323
On the Theory of the Absorption of Ultrasound in Superconductors I. A. Privorotski' Effect of ** Interaction on s and p Waves of *N Scattering	945	43,	1331
P. S. Isaev and V. A. Meshcheryakov Possibility of a New Method for Investigating the Statistical Behavior of Linear Systems	951 ,	43,	1339
M. I. Podgorøtski I	958	43,	1349
Scattering of Gamma Quanta and Polarizability of Nuclei and Nucleons L. L. L. Lapidus	964	48,	1358
Certain Interference Phenomena in K [®] R [®] Systems . V. I. Ogievetskii and M. I. Podgoretskii Available From Amer Inst of Phys	967	43,	1362

Amer Inst of Phys Sov Phys - JETP Vol XVI, No

ZHURNAL EKSPERIMENTAL'NOI I TEORETICHESKOI FIZIKI Vol XLIII, No 4, 1962

ADT WITTE NO + 1 TACK			
CONTENTS-continued	Page	Rus Refer	
Quantum Electrodynamics in Terms of Electromagnetic Field, Intensities			
V. I. Ogievetskil and I. V. Polubarinov	969	43,	1365
Integral Representations in Perturbation Theory	973	43,	1371
Phase-Shift Analysis of Nucleon-nucleon Scattering at 49, 95, 147, and 310 MeV	978	43,	1378
Tu, hi. Kuzarinov and i. N. Silin	983	43,	1385
Effect of Internal Thermal Motion on the Polarizability of Plasmoids V. B. Gil'denburg	989	43,	1394
Analytic Properties of Partial Amplitudes Yu. M. Malyuta	991	43.	1397
The Problem of "Surface" Divergences in the Bogolyubov Method A. D. Sukhanov The Origin of High-energy Cosmic-ray Muons and Photons and the Hyperon Hypothesis	993	43,	1400
Attenuation of Electromagnetic Waves in an Inhomogeneous Medium Related to Transition	1001	13,	141'
Radiation V. Ya. Eidman The Three-body Problem for Short-range Forces in the Linear Approximation in the Force	1006	43,	1415
Range G. S. Danilov	1010	43,	1424
The Role of Short-range Three-particle Forces in Processes with the Generation of Three		-	
Particles New Threshold	1017	43,	1436
Singularities Caused by Electron-phonon interaction in the Phonon Dispersion Law	1025	43,	1448
Theory of Quantum Cyclotron Resonance in Metals	1030	13,	1456
I. M. Lifshitz, M. Ya, Azbel', and A. A. Sutskin Theory of Wave Conversion and Scattering on Plasma Fluctuations	1035	43,	1464
F. G. Bass and A. Ya. Blank	1046	43,	1479
Heat Anomaly of Superconductors	1052	43.	1489
On the Mass of a Complex Vector Field	1055	43,	1493
Fiolds	1057	43.	1496
Energy-level Shifts and the Equation of State of a Plasma . L. P. Kudrin and Yu. A. Tarasov Conversion of Electron-positron pairs into \(\mu \)-Meson Pairs	1062	43,	1504
The Small Probability of the Processes $\mu \rightarrow 0 + \gamma$, $\mu \rightarrow 0 + e + e$ and Neutral Currents in	1070	43,	1617
Weak Interactions	1073	43,	1521
	1076	43,	1524
The Effect of Orientation of the Molecules of a Liquid in an Electric Field on Nuclear Magnetic Resonance	1078	43,	1826
Fermion Regge Poles and the Asymptotic Behavior of Meson-nucleon Large-angle Scat- tering	1080	43.	1529
The Effect of Conducting Electrons on the Kapitzs Temperature Jump A. F. Andresv	1084	.43.	1838
## Interactions in the Multiple Production of Pions in πp Collisions M. 8. Almutdinov S. M. Zombkovskil, S. Ya. Nikitin, Ya. M. Selektor, and V. N. Shulyachenko	1089	43,	1543
I STORED TO THE SECTION			
LETTERS TO THE EDITOR Trapping and Containment of a Turbulently Heated Plasma in a Mirror System			
M. V. Bahykin, P. P. Gavrin, E. K. Zavolskil, L. I. Rudakov, and V. A. Skoryupin Photoproduction of Neutral Phons on Hydrogen and Douterium at Law Apples.	1092	43,	1547
A. S. Belousov, S. V. Rusakov, E. I. Tamm, and I., S. Tatarinakaya	1094	43,	1550
Sensitivity of Liquid to Radiation Yu. A. Aleksandrov, G. S. Voronov, and N. B. Delone Possibility of Observing Neutral Currents in Neutrino Experiments	1095	43,	1562
S. S. Gershtein, Nguyen Van Hieu, and R. A. Éramzhyan Limitation on the Rate of Decrease of Amplitudes for Various Processes	1097	43,	1554
V N Orthow and I Va Pomeranchule	1098	43,	1556
Combination Radiation in Uniform Motion of a Charge in a Homogeneous Medium	1100	43,	1559
An investigation of Rotating Hell Near the An Point Helm Second Round	1102	43,	1561
Search for Resonances in the K ^F K ⁶ Pair inroduction Resoling	1103	43,	1 562
V. V. Barmin, Yu. S. Krestnikov, E. V. Kusnetsov, A. G. Meshkovskii, and V. A. Shebanov Available From Amer Inst of Phys	1104	43,	1564
Sov Phys - JITP Vol XVI, No 4			

TABLE OF CONTENTS

ZHURNAL NEORGANICHESKOI KHIMII	Russian	English
ZHURHAL NEORGANI GHESKOI KHIMII VOI 1, No 3, 1956	page	page
Sheka, I. A. Yakov Anatol'evich Fialkov (On the		
occusion of his 60th birthday)	353	1
Shehukarev, S.A. and C.I. Novikov. Thermodynamic	203	•
Investigation of Certain Chlorine Derivatives of Tungsten	357	6
Shchukarev, S.A. and G.I. Novikov. Reduction of	557	•
Cerium Trichloride by Hydrogen	362	12
Krylov, E. I. Synthesis and Properties of Yttrium Orthotitanite	366	16
Khodakov, Yu.V. Chemistry of Oxygen Phosphorus		••
Compounds in the Light of the Structural Theory	368	18
Luzarev, A.I. The Action of Liquid Amalgams on		
Perrhanates	385	37
Konarev, M.I., A.N. Panteleeva, V.V. Repina,		•
and A.S. Solovkin. The influence of the Nature		
of an Acid on the Composition of Freshly Precipitated		
Zirconium Iodates	392	44
Gil'dengershel', Kh.I. New Methods for the Synthesis		•••
of Tetrammine Chloride and Trans-diammine Chloride		
Complexes of Platinum	400	52
Podchainova, V.N., E.I. Krylov, and D.I.		•
Ryabchikov. The Valency of Copper in Some of		
its Complex Compounds	406	58
Yatzimirskii, K.B. Some Functions Characteristic of	•••	-
Consecutive Complex Formation in Solutions	412	64
Panova, V.E. The Composition and Stability of the		•
Tartratolead Complex Ions	422	75
Vinogradova, L.L. and B. V. Ptitsyn, Determination		
of the Instability Constants of Potassium Trioxulatoferriat	e	
by the Method of Displaced Equilibrium	427	81
Vinogradova, L.I. and B.V. Ptitsyn. Determination of		
Instability Constants of Potassium Trioxalatoferriates by Me	a ns	
of the Reaction Between an Iron Salt and Silver Oxalate	432	87
Yatsimirskii, K.B. and E.I. Yasinskene, Kinetics		
and Mechanism of the Reaction of Fermation of Urea		
Complex Compound of Tervalent Chromium	438	94
Spitsyn, Vikt. I. and I.D. Kolli. Studies on Dahydration		
and Thermal Decomposition of Potassium Silicotungstate	445	102
Kolli, I.D., G.D. Pirogova, and Vikt, I. Spitsyn.		
Dehydration of Sodium Paratungstate	460	117
Kolli, L.D., G.N. Pirogova, and Vikt. L. Spitsyn.		
Dehydration of Sodium Metatungstate	470	128

CONTENTS (Contd)

ZHURNAL NEORGANI CHESKOI KHIMII VOI 1, NO 3, 1956

Russian English page page Chukhlantsev, V.G. and S.I. Stepanov. Solubility 478 135 of Uranyl and Thorium Phosphates Babko, A.K. Nature of the Soluble Complex Formed During the Reaction Between Nickel, Dimethylglyoxine 485 142 and an Oxidizing Agent Vert, Zh. L. and M. V. Kamentsev. Formation of Sulfides 489 147 by the Reaction of Ferrous Sulfide with Oxides of Metals Mikheeva, L.M., A.V. Novoselova, and R. Biktimirov. Determination of the Solubility of Calcium 499 159 Fluoride and Calcium Fluoroberyllate in Water and in Hydrochloric Acid Solutions by the Tracer Atom Method Gel'bshtein, A.I., G.G. Shcheglova, and M. I. Temkin. Acidity Function of the H2SO4 - H2O System at Various Temperatures 167 Vorob'eva, O.I., A.V. Novoselova, A.G. Zhasmin, and Yu. P. Simanov. The System NaF -BeF2 - H2O 177 515 Levelienko, V.M. Thermal Analysis of Sea Water 191 Sveshnikova, V.N. and M.N. Lyashenko. Reaction of Nepheline with Phosphoric Acid 195 532 Iyernko, Yu. A., O. A. Oslpov, and E.K. Akopov. Physicochemical Investigation of the Reaction of Titanium Tetrachloride with Esters of Monobasic Acids 199 536 Yarym - Aguev, N. L. Criteria for Appearance of Limiting Points on Isotherms on Passing from Molecular to Specific Property Isotherms and Vice Versa 542 206 Spitsyn, Vikt. I. Use of Labeled Atoms in Studies on the Structure of Some Aquopoly and Heteropoly Compounds 552 217 Fialkov, Ya. A. and Yu.P. Nazarenko. Study of the Reaction of Isotope Exchange in Solutions of Green Modifications of Chromium Salts 565 231 Kuznetsov, V.I. and G.V. Myasoedova. Use of Organic Coprecipitating Agents for the Study of the Mechanism of Reactions in Very Dilute Solutions 579 247 Sheka, Z. A. and E. E. Kriss. A Study of the Reaction of Formation of Cobalt Xanthate 586 254 Starik, I.E. and N.G. Rozovskaya. Sorption of Polonium by Glass 598 267 Rules for Authors 276 Author Index 278 Subject index 280 List of Abbreviations 284

TABLE OF CONTENTS

ZHURNAL NEORGANICHESKOI KHIMII	Russian	English
Vol 1, No 5, 1956	page	belle
Shehukurev, S.A., M.A. Oranskaya, and V.M.		
Tsintsius. Thermal Dissociation of Gold Chlorides	881	1
Novoselova, A.V. and K.N. Semenenko. Beryllium		
Oxymonochloroscetate	887	8
Chernyaev, I.I. and V.A. Palkin. Heat of Solution		
and Lattice Energy of Bivalent Platinum Tetrammines	890	11
Mikheeva, V.I. and E.M. Fedneva. Complex Compound	•	
of Boron Hydrides with Nitrogen-Containing Organic Bases	894	45
Goroshchenko, Ya.G. Niobium Sulfates	903	15 24
Goroshchenko, Ya.G. Double Salts of Niobium Sulfate	303	67
with Ammonium Sulfate	909	30
Goroshchenko, Ya.G. Studies on the Double Salts of		•
Tentalum and Ammonium Sulfates	915	36
Babaeva, A.V. and R.I. Rudyi. The Electronic		
Absorption Spectra of Complex Compounds in the		
Crystalline State	921	42
Toropova, V.F. Stability of Thiourea Complex Compounds		
of Mercury	930	52
Bigich, N.S. Cryoscopic Study of Several Complex		
Compounds of Aluminum Bromide in Nitrobenzene	938	61
Spitsyn, Vikt. I. and K. G. Koneva. An Electrochemical		
Method of Preparation of Heteropoly Compounds	941	65
Yatsimirskii, K.B. and I.I. Alekseeva. The Kinetic Study of Oxalate and Phosphate Complexes of Molybden	062	-
Kullberg, L.M. and A.G. Kovaleva. A Study of the	um 932	76
Mechanism of Reaction of Salicylic Acid with Salts of		
Certain Metals, in the Presence of Sodium Nitrite	958	83
Sheka, I.A. and B.A. Voitovich, The Compounds of	***	00
Zirconium Tetrachloride with Phosphorus Oxychloride	964	89
Babko, A.K. and G.S. Lisetskaya. Equilibrium in		
Reactions of Formation of Thiosalts of Tin, Antimony,		
and Amenic in Solution	969	95
Tananzev, I.V. and G.B. Seifer. The Problem of the		
Solubility of Cs(PbCH3COO2)[Fe(CN)6] in Water-		
Alcohol Mixtures	981	108
Yatsimirskii, K.B. and V.N. Vasil'eva. Thermo-		
chemical Studies of Solutions of Chromium Anhydride	004	
in Sulfuric Acid	984	111
Yanat'eva, O.K. and V.T. Orlova. A Study of		
Equilibria in the System K ₂ SO ₄ - Na ₂ SO ₄ - MgSO ₄ -	988	116
H ₂ O at 55°	200	110

CONTENTS (Contd)

ZHURNAL NEORGANI CHESKOI KHIMI I

Vol I, No 5, 1956		
100 0, 100	Russian	English
	page	page
Bodslevs, N.V. and I.N. Lepeshkov. A Study of		
Solubility in the System K2SO4 - MgSO4 - CaSO4 -		
H ₂ O at 55°	995	123
Migal', P.K. and A.Ya. Sychev. A Physicochemical	•••	
Investigation of the System NiSO ₄ - C ₆ H ₅ O ₇ Na ₂ in		
Aqueous Medium	1008	137
Plyushchev, V.E. and F.V. Kovalev. Studies of	1000	13/
Interaction of Alkali and Alkaline-Earth Metal		
Chlorides in Melts. IV. Ternary System Composed	***	445
of Lithium, Potassium and Calcium Citlorides	1013	142
Akopov, E.K. The Ternary System of the Chlorides of	4040	
Lithium, Sodium, and Potamium	1019	148
Belyaev, I.N., M.L. Sholokhovich, and G.V. Barke	DVE.	
Interaction Between the Titanates and Molybdates of		
Potessium and Lead in Melts	1026	155
Bakumskaya, E.L. and A.G. Bergman. The Ternary		
System of the Sodium, Potassium, and Cadmium		
Sulfates	1035	164
Elagina, E.I. and A.P. Paikin. Reactions of Salts with		
Metals in Melts. Interaction in the System		
$CdCl_2 + Zn \rightarrow ZnCl_2 + Cd$	1042	171
Grigor'ev, A.T., E.M. Sokolovskaya, and M.V.		
Maksimova. Study of Alloys of the System Gold-		
Cobalt	1047	176
Grigor'ev, A.T., E.M. Sokolovskaya, L.D.		
Budennaya, T.A. Lyutina, and M.V.		
Maksimova. Investigations of the System Palladi	um =	
Gold - Cobalt	1052	181
Grigor'ev, A.T., LA, Panteleimonov, LM, Viti	DE.	
and V. V. Kupring. Investigation of the System		
Copper - Cobalt	1064	195
Grigor'ev, A.T., L.A. Panteleimonov, V. V. Kup		
and LI, Rybakova. Investigations of the System	-	
Palladium - Copper - Cobait	1067	199
Rudnitskii, A.A. and I.I. Tyurin. The Investigation		.,,
and Choice of Alloys for High-Temperature		
• • •	4.074	
Thermocouples	1074	207
Rudenko, N.P. Methods of Separation of Radioactive	4 004	***
Isotopes Using Complex Formation	1091	225
Troitskii, K.V. The Use of Coprecipitation for the		
Isolation of Trace Amounts of Various Metals	1104	239
Kurnetsov, V.I. and E.V. Mitrofanova. Extraction		
Mercuric Chloride with Solvent Mixtures	1117	253

CONTENTS (Contd)

ZHURNAL NEORGANICHESKOI KHIMII

Vol 1, No 5, 1956	belle grasses	Englisi paga
BOOK PEVIEW		
Nikolsev, A.V. Prof. Dr. A.D. Keshan. Synthesis and Investigation of Borates in Aqueous Solutions	1122	258
CURRENT AFFAIRS		
Sheka, I.A. Second Ukrainian Republic Conference on		
inorganic Chemistry	1123	260
Rules for Authors	11 28	265
Author Index		267
Subject Index		269
Explanatory List of Abbreviations	-	278

*[Translators' note: All the photographs in this translation have been reduced by approximately 25 %,]

TABLE OF CONTENTS

ZHURNAL NEORGANICHESKOI KHIMII Vol I, No 6, 1956	Russian page	English page
From the Editorial Board	1129	1
Semenchenko, V.K. Fundamental Problems of the		•
Contemporary Theory of Solutions	1131	2
Bokii, G.B. Daltonides and Berthollides in the Light of the		-
Atomic Theory of Crystal Structure	1150	23
Ermolenko, N.F. and Kh. Ya Levitman. Physicochemic		
Study of Molecular Compounds in Solutions by the		
Measurement of the Refractive Indexes	1162	36
Yarm - Agaev, N.L. Form of the Extensive Property		••
Isotherm Referred to Unit Quantity of Substance		
(Quasi-Intensive Property)	1173	47
Topchiev, A.V., L.M. Rorenberg, N.A. Nechitaile		••
and E.M. Terent'eva. Differential Thermal Study	-,	
of Complex Formation in the System Urea -n-Paraffin	1185	60
Shakhparonov, M.I. The Structure of Solutions	1194	70
Samoilov, O. Ya. Structures of Dilute Aqueous Solutions		
of Electrolytes and Hydration of Ions	1202	79
Krupatkin, I.I. Theory of Separation of Liquids	1210	88
Anosov, V. Ya. and N. N. Patsukova. The Problem of		
the Dissociation of the Double Salis KCl. ZnSO4:		
KBr. ZnSO4, PbF2. PbCl2, and KCl. MgCl2 on Melting	1223	104
Fialkov, Ya. A. and Z. A. Sheka. Complex Formation in		•••
Aqueous Solutions of Sulfuric Acid and Some Metai		
Sulfates	1238	120
Komari, N.P. Spectrophotometry as a Means of		•••
Physicochemical Analysis of Solutions	1243	126
Shishkin, N.V. and E. A. Krogius. Inorganic Oxonium		• • • • • • • • • • • • • • • • • • • •
Compounds	1252	136
Neiman, M.B. and A. Ya. Shinyaev. Investigation of		•••
Diffusion in Binary Alloys as a New Method of		
Physicochemical Analysis	1 257	141
Zimina, K.I., A.A. Polyakova, and N.S. Sosina.		
Muss-Spectral Analysis of Hydrocarbon Systems	1264	148
Regel', A.R. Electrodeless Method of Measuring Electrics		
Conductivity and Possibilities of its Use in Physico-	•	
chemical Analysis	1271	155
Zdanovskii, A.B. A Kinetic Method for Determination o		.55
Solubility	1279	164
Rassonskaya, I.S. The Interpretation of the Nature of	- 41 -	
Thermal Effects in Heating Curves	1284	169
	9 804	. 55

CONTENTS (Contd)

ZHURNAL NEORGANICHESKOI KHIMII Vol I, No 6, 1956

· ·	Rüsslan	English
	page	page
Keler, E.K. and A.K. Kuznetsov. The Use of Complex		
Thermal Analysis in Physicochemical and Technical Studies	1292	178
Durov, S.A. Development and Application of New		
Geometrical Methods in Hydrochemistry	1296	182
Rudnitskii, A.A. Thermoelectric Method of Studying		
Transformations in Metals and Alloys	1305	192
Frontas'ev, V.P. An Optical Method for the Determination	1	•••
of the Thermal Conductivity of Liquids and its Use in		
Physicochemical Analysis	1322	209
Nikolaev, A.V. Use of Labeled Atoms in Physicochemical		
Analysis	1328	216
Gubkin, S.I. Physicochemical Theory of Plasticity	1334	223
Strelkov, P.G. Dilatometry of Solids and Some of its		
Applications	1350	240
Ageev, N.V. Opening Address at the Session o. the Metals		
Section of the Third All-Union Conference on Physico-		
chemical Analysis	1358	248
Grum - Grahimailo, N.V. Some Characteristics of the		
Variation of Galvanomagnetic Properties Related to the		
Composition of Alloys	1361	252
Kornilov, I.l. The Significance of Physicochemical		
Analysis in the Chemistry of Metals	1.368	260
Pokrovskii, N.L. Certain Properties of Surface-Active Metals	1383	276
Pugachevich, P.P. and O.A. Timofeevicheva.		•
Surface Tension of Amalgams of Alkali Metals	1387	280
Gladyshevskii, E. l. and E. E. Cherkashin. Solid		
Solutions on the Basis of Metallic Compounds	1394	288
Smolenskii, G.A. Ferroelectric Phase Transformations		
in Solid Solutions of Perovskite Structure Formed in		
Some Binary Systems	1402	296
Urazov, G.G., E.I. Speranskaya, and Z.F.		
Gulyanitskaya. Physicochemical Studies on the		
Interaction of Lead Oxide with Tin and Antimony Oxide	1413	307
Urazov, G.G. and E.I. Speranskaya. Interaction of		
Lead Oxide with Antimony Oxides	1418	312
Rode, E. Ya. A Physicochemical Study of Metal Oxides and		
Hydroxides	1430	3 26
Sokolova, M.A. Investigation of the System Ni-S		
(From 30.0 to 50.0 at. % S)	1440	337
Author Index	-	357
Subject Index	·,	359
Explanatory List of Abbreviations	_	367

Available From AEC-Tr-4587

TABLE OF CONTENTS

I MBLE OF CONTENTS		
ZHURNAL NEORGANICHESKOI KHIMIP	ussian	English
Vol 1, No 8, 1956	page	page
Shehukarev, S.A., T.A. Tolmacheva, M.A.		
Oranskaya, and E.A. Ukraintseva. The Thermal		
Dissociation of Chromium Bromide and Chromium Chloride	1697	1
Fomin, V.V. and E.P. Maiorova. Determination of		-
Stability Constants of Th(NO ₃) _x ^{4-x} ions by Means of		
Tributyi Phosphate Extraction	1703	7
Berger, I.I., N.G. Sevast'yanov, and L.K. Putilina.		
The Oxides of Tungsten	1713	18
Kovalenko, P.N. The Utilization of a Polarographic Cell		
for the Determination of the pH at the Commencement of		
the Precipitation of Manganese Hydroxide and of its		_
Solubility Product	1717	22
Zinov'ev, A. A. and L.I. Chudinova. Thermal		
Decomposition of the Perchlorates of Magnesium, Calcium,	1722	20
Barium, and Aluminum Gogorishvili, P.V., M.V. Karkarishvili, and L.D.	1166	28
Tsitsishvili. Complex Compounds of Bivalent		
Cobalt with Hydrazine and Hydrazinecarboxylic Acid	1731	37
Gol'braikh, Z.E. Some Properties of Copper α-Alaninate	1739	46
Gil'dengers: el', Kh.I. Methods of Synthesis of Some		
, , ,		
Diamines of Bivalent Platinum of the Type $\begin{bmatrix} a & Pt & Cl \\ a & Cl \end{bmatrix}$	1745	52
Sirotkin, G.D. The Absorption of Nitric Oxide by Aqueous		
Ammoniacal Solutions of Salts of Bivalent Cobalt	1750	58
Nazarenko, Yu.P. and R.S. Khalmovich. The Deter-		
mination of the Composition of Green Chromic Bromide		
by the Argentometric Method	1758	66
Nisel'son, L.A. and B.N. Ivanov-Emin. The Problem of the Products of the Reaction of Tetrachlorides of		
Zirconium and Hafnium with Phosphorus Oxychloride	1766	74
Spitsyn, Vikt. I. and A. V. Lapitskii. A Thermographic	1700	/4
Study of the Reaction of Niobium Pentoxide with Sodium		
Hydroxide	1771	79
Lapitskii, A.V., Vikt.l. Spitsyn, V.A. Pchelkin, and		
Yu. P. Simanov. Thermographic and X-Ray Studies on		
the Processes of Dehydration of Sodium and Potassium		
Niobates	1776	85
Pchelkin, V.A., A.V. Lapitskii, Vikt.I. Spitsyn, and		
Yu. P. Simanov. Thermographic and X-Ray Studies of		
the Dchydration of Hexaniobates of Some Bivalent Metals	1784	94
Available From AEC-Tr-4589		

CONTENTS (Contd)

ZHURNAL NEORGANI CHESKOI KHIMII VOI I, No 8, 1956	page Junian	English page
Spitsyn, Vikt.1. and E.A. Torchenkova. Studies on Paratungstate Ion Transformations in Solutions with the	4004	400
Aid of a Mixed Sodium-Cesium Peratungitate Salt Degtysrev, V.F. and E.P. Darienko. Studies on the	1794	105
Mechanism of the Reaction Between Sodium Orthotungstate		
and 8-Hydroxyquinoline Hydrochloride in Aqueous Solution		
by Means of Conductometric Titration	1798	109
Savchenko, G.S. and E.V. Goncharov. Studies on the		
Reaction Between Gallium Chioride and Tartaric Acid		
and its Sodium Salts	1804	115
Tananaev, I.V. and N.V. Mzareulishvili. A Study of		
the Formution of Silver Hydroxide	1826	138
Palkin, A.P. and G.P. Chepurko. Reactions of Salts with		
Molten Metals. Reaction of CuCl with Zinc	1832	144
Smirnov, M.V. and L.E. Ivanovskii. Reaction of Thorius	m	
Oxide with its Chloride in Sait Melts	1843	155
Zinoviev, A.A., L.I. Chudinova, and L.P. Smolina.		
The Binary System of Sodium Perchlorate - Barium		
Perchlorate	1850	163
Urazov, G.G., V.S. Lovchikov, and B.M. Lipshits.		
Viscosity and Static Shearing Stress in Alkaline Mults		
Containing Sodium Antimonate or Arsenate	1857	170
Voskresenskaya, N.K. and S.I. Beruli. Thermal		
Stability of a Low-Melting Mixture of Nitrites and Nitrates		180
of Sodium and Potassium	1867	180
Gorenbein, E. Ya. Study of Complex Formation in Ternary		
System Solutions by Physiochemical Methods, VI. System	1877	191
AiBr3 - C6H5NO2 - C2H5Br Sheveleva. A.D. The Mutual Solubility in the System	10//	131
Ammonium Dichromate - Ammonium Sulfate - Water	1883	197
Shevchuk, V.G. and I.N. Lepeshkov. The Solubility	1003	
Isotherm of the Quaternary System Na ₂ SO ₄ - 2nSO ₄ -		
(NH ₄) ₂ SO ₄ - H ₂ O at 35°	1888	202
Paramonova, V.I. and V.B. Kolychev, Studies on the	,,,,,	
State of Radioactive Niobium in Nitric Acid Solutions by		
Means of Ion Exchange and Dialysis	1896	210
Peramonova, V.I. and A.S. Voevodskii. Ion Exchange		
Study of the State of Zirconium in Sulfuric and		
Nitric Acid Solutions	1905	220
Korshunov, I. A. and Z. M. Lebedeva. Isotopic Exchange	1	
of Iron Atoms in Prussian Blue	1912	227

CONTENTS (Contd)

ZHURNAL NEORGANICHESKOI KHIMII VOI I, No 8, 1956	Russian page	Engisii page
Filinov, F. M. and V. R. Budanova. Studies on the Solubility of Cobalt Pyrophosphate in Water, Hydrochloric		220
Acid, Sulfuric Acid and in Sodium Pyrophosphate Solution BRIEF COMMUNICATIONS	1919	229
Bokii, G.B., and I.N. Anikin. The Determination of the Solubility of Scheelite (CaWO4) in Water and in Aqueous Solutions of NaCl and LICl by the Radiochemical Method Medoks, G.V. and L.A. Maslova. A Contribution to the Problem of the F. eparation of Phosphorus Tribromide	1926 1939	240 244
BOOK REVIEW		
Gurovich, E.I. "Hafnium" (collection of articles translated from foreign periodical literature, edited by L. N.		
Komissarova) Vol'nov, I.I., W. Schumb, Chas. N. Satterfield, and	1931	246
R. L. Wentworth. Hydrogen Peroxide	1932	247
Author Index		250
Subject Index	_	252
Explanatory List of Abbreviations	-	257
Available From AEC-Tr-4589		

RUSSIAN JOURNAL of INORGANIC CHEMISTRY

ZHURNAL NEORGANICHESKOY KHIMII

CONTENTS

	PAGE	
(957)	-	New scale and Table of Atomic Weights (not translated)
(080)	405	Production of substances of high purity A.V.NOVOEELOVA
(963)	496	Determination of the vapour pressures of solid germanium selenide and tellugide LIU CH'UN-HUA, A.S. PASHINKIN, and A.V.NOVOSELOVA
(967)	499	X-Ray diffraction examination of sodium oscalde NaC ₅ V.G.KUZNETSOV, S.A. TOKAREVA, and M.S. DOBROLYUBOVA
(971)	800	Preparation of mirconium(IV) and hamium(IV) iodides by halide exchange L.A.MSEL'SON, M.V.TESLITSKAYA, and T.A.SHVEDOVA
(978)	502	Preparation and some physicochemical properties of yttrium carbides G.V.SAMSONOV, T.Ya.KOSOLAPOVA, and G.N.MAKARENKO
(980)	806	Oxidation of titanium nitride in dry and moist air I.V. FEDOSEEV and O. G. NEMKOVA
(883)	804	Solubility product of basic uranium(IV) sulphate M. A. STEPANOV and N. P. GALKIN
(987)	508	Solubility of the geometrical isomers of platinum complexes in electrolyte solutions A.A.GRINBERG, E.N.IN'KOVA, and A.I.DOBROBORSKAYA
(992)	811	Interaction between complexes of the same metal in the same oxida- tion state A.A.GRINBERG and M.I.GEL'FMAN
(997)	613	Infra-red absorption spectra and structure of "anomalous" ammine— nitrile complexes of bivelent platinum Yu.Ya. KHARITONOV, NI CHA-CHIEN, and A.V. BABAEVA
(1009)	519	Use of the silver citrate electrode to determine instability constants of complex citrates B. V. PTITSYN, L. I. VINOGRADOVA, and L. L. VASIL'EVA
(1018)	620	Selenocyanatocobalt complexes A. M. GOLUB and V. V. SKOPENICO
(1031)	525	Spectrophotometric study of the sold-base squilibrium of dimethyl- glyoxime complexes of tervalect cobalt A.V.ABLOV and M. P. FILIPPOV
(1028)	526	Interaction of uranyl nitrate solutions and alkali-metal carbonates V.I. PARAMONOVA, B. P. NIKOL'SKII, and N. M. NIKOLAEVA
(1036)	633	Complex formation of Zr ^{IV} and Hf ^{IV} with chloride, nitrate, and oxalate ions 1.N.MAROV and D.I.RYABCHIKOV
(1049)	539	Composition of complexes of rare-earth elements with nitrilotriscetic acid in ion-exchange chromatography N.D. MITROFANOVA and L.I. MARTYNENKO
(1084)	642	Preparation and properties of sodium stroomate and sodium hafnate A.A.GRIZIK and V.E.PLYUSHCHEV
(1042)	546	Solubility and thermal stability of zirconium and halnium oxide nitrate hexabydrates L.I. YURANOVA, I.'N.KOMISSAROVA, and V.E. PLYUSKCHEV
(1066)	549	Pyrophosphate complexes of cadmium M.S. NOVAKOVSKII and M.G. MUSHKINA
(1074)	551	Thermal decomposition of copper selecate N.M.SELIVANOVA, A.I.MAIER, and K.K.SAMPLAVSKAYA
(1084)	556	Preparation of heteropoly molybdotitanic soid Z.F.SHAKHOVA and E.N.SEMENGVSKAYA
Avai	lable	e From Chemical Society

ZIURNAL NEORGANICHESKOY KHIMII No 5, 1962

ZIBUE	WALL	No 5, 1962
	c	CONTENTS (CONTD)
(1067)	688	Polarographic study of formation of complexes between mercury tons and ammonia in aqueous solution Ya.I. TURYAN and V. F. ROMANOV
(1090)	560	New method of calculating stability constants in successive complex formation
		K.B. YATSIMIRSKII and L.I. BUDARIN
(1096)	562	Comparative estimation of the stability of complexes by ion-exchange chromatography M. M. SENYAVIN and L. I. TIKHONOVA
(1101)	548	Solubility of chlorine in molten chlorides Yu. M. RYABUKHIN
(1106)	567	Solid-state transformations in alloys of the chromium-iron system A. T. GRIGOR'EV, E. M. SOKOLOVSKAYA, L. I. PYATIGORSKAYA, and M. V. MAKSIMOVA
(1110)	570	Alloys of the gold-nicksi-palladium system A.T.GRIGOR'EV, L.A.PANTELEIMONOV, V.V.KUPRINA, G.V.GOLDOBINA, and M.A.RUDNITSKII
(1117)	673	Molybdenum-silicon-vanadium system E.M.SAVITSKII, V.V.BARON, Yu.V.EFIMOV, and E.I.GLADYSHEVSKII
(1126)	679	The Bi ₁ O ₂ -MoO ₂ -PbO ternary system 1.N.BELYAEV and N.P.SMOLYANINOV
(1132)	581	Exchange of todine in the $I_1-I_2O_3$ system Yu. Ye. FIALKOV and Yu. A. YARASENKO
(1137)	684	Reaction of chromium(III) chloride with sodium, potassium, and magnesium chlorides in melts B.G.KORSHUNOV and B.Ya.RASKIN
(1141)	587	The K, Li Cl. PgO; reciprocal system V. P.GORYACHEVA and A. G. BERGMAN
(1146)	589	Fusion in the Ne ₂ Cr ₄ C ₇ Rb_2 Cr ₂ Cr ₂ and Ce ₂ Cr ₂ O ₇ Ne_2 Cr ₂ O ₇ systems R.G. SAMUSFVA, I. F. POLETAEV, and V. E. PLYUSHCHEV
(1180)	891	Solubility of gallium hydroxide in sodium hydroxide and potassium hydroxide solutions at 25° B. N.IVANOV-EMIN, L.A.NIBEL'SON, and N.I.GVOZDEVA
(1164)	893	Electrical conductivity in the CdCl ₂ -MCl-H ₂ O system V.A.TYAGAI, V.S.GALINKER, and G.N.FENERLE
(1169)	596	Study of the ZrO ₂ -HCl-H ₂ O system by solubility and spec- trophotometry Ya.G.GOROSHCHENKO and T.P.SPASIBENKO
(1169)	699	Cerium phosphate-phosphoric sold-water system at 70° V. N. SVESHNIKOVA and V. L. GINZBURG
(1174)	602	Coprecipitation of germanium with tervalent metal hydroxides I.V. TANANAEV and M.Ya. SHPIRT
(1182)	606	Coprecipitation in the Ti*, H* Ru ^{III} , 8 ¹⁻ system N. A. RUDNEV and G.I. MALOFEEVA
(1187)	609	Study of the state of ziroonium in solution by absorption on ion-exchange resins B.I. NABIVANETS
(1191)	612	Extraction of nicotum and tentalum, N-bearsylphorythydroxylamines I. P. ALIMARIN and O. M. PETRUKHIN
(1197)	515	influence of the organic solvent on the formation of tetrochlorofer- rate(III) ion when iron is extracted from chloride solutions Yu. A. ZOLOTOV, I.V. SERYAKOVA, I.I. ANTIPOVA-KARATAEVA, Yu. I. KUTSENKO, and A. V. KARYAKIN
(1204)	619	Instability constants of complex zirconium fluorides Yu. A. BUSLAEV
(1206)	620	Determination of the molar refraction of some urea compounds of the uranyl ion V.P.MARKOV and I.V.TEAPKINA
(1206)	621	Zeolitic nature of transition metal cyanoferrates(II) G.B.SEIFER
(1209)	632	The Pr-PrCl ₃ system B.I. NOVIKOV and O.G. POLYACHENOK
Avai	labl	e From Chemical Society

Available From Chemical Society

Brief Communications

RUSSIAN JOURNAL of INORGANIC CHEMISTRY

ZHURNAL NEORGANICHESKOY KHIMII

CONTENTS

(1218)	PAGE 628	Enthalpy of formation of nichlum pentabromide and oxide tribromide 8.A.SHCHUKAREV, E.K.SMIRNOVA, I.V.VASIL'KOVA, and N.I.BOROVKOVA
(1916)	626	Hydrolysis and enthalpy of formation of miobium oxide trichloride S.A.SHCHUKAREV, E.K.SMIRNOVA, T.S.SHEMYAKINA, and E.N.RYABOV
(1819)	628	Apparatus for measuring dissociation pressure of ferrites and oxides at high temperatures Yu. D. TRET'YAKOV and K.G. KHOMYAKOV
(1225)	631	The change in thermodynamic functions on hydration of tervalent lanthanide cations E.K.ZOLOTAREV and V.E.KALININA
(1228)	633	Reaction of potassium superoxide with water vapour and carbon dioxide A. Kh. MEL'NIKOV, T. P. FIRSOVA, and A. N. MOLODKINA
(1237)	637	Preparation of pure potassium peroxodicarbonate and some of its properties A. KL. MEL'NIKOV, T. P. FIRSOVA, and A. N. MOLODKINA
(1242)	640	The thermal decomposition of alkali cyanoferrates(II) G. B. SEIFER
(1247)	643	Infra-red absorption spectra of complex cobalt(III) sulphites A.V.BABAEVA, Yu.Ya.KHARITONOV, and I.B.BARANOVSKII
(1258)	649	Inner complexes of nickel with hydrazinedithiccarboxylic acid P.V.GOGORISHVILI and M.G.TSKITISHVIII
(1265)	663	Selenocyanato—nickei complexes A. M. GOLUB and V. V. SKOPENKO
(1272)	657	Tetranuciear oxocarbonato-ferrate(III) complexes O. E. ZVYAGINTSEV and Yu.S. LOPATTO
(1977)	659	Mechanism of Guyard's reaction and the exchange of coygen between potassium permanganate and water N. A. VYSOTSKAYA
(1280)	661	Thermochemistry of complex formation of thallium(III) with 2,2'-bipyridyl and 1,10-phenanthroline in aqueous solution F.Ya.KUL'BA and Yu.A.MAKASHEV
(1285)	664	Reaction of beryllium expacetate complexes of type Be ₄ O(CH ₃ COO) ₆ . 3RNH ₁ with alcohole E.G. POGODILOVA, A.I.GRIGOR'EV, and A.V. NOVOSELOVA
(1291)	666	
(1299)	670	Stereochemistry of copper and vanadyl inner complexes with anomalous magnetic properties V.V.ZELENTSOV
(1306)	673	Determination of successive stability constants from potentiometric measurements by the method of corresponding solutions L.V.NAZAROVA and A.V.ABLOV
Avai	[lab]	e From Chemical Society

ZHURNAL NEORGANICHESKOY KHIMII

No 6, 1962

CONTENTS (CONTD)

(1809)	675	Complex formation by cadmium, lead, and zinc ions with formamide in agreeous methanol and agreeous ethanol solutions P. K. MIGAL' and N. Kh. GRINDERG
(1313)	677	Sodium difluorophosphate I.G.RY85 and V.B.TUL'CHINSKII
(1316)	678	Kinetics of the hydrolysis of trimethylamine sulphur trioxide I.G.RYSS and L.P.BOGDANOVA
(1320)	681	Evaluation of the probability of compound formation in binary systems of salts and oxides O.K.SOKOLOV and A.I.BELYAEV
(1328)	684	Use of crystal chemistry to predict double decompositions in melts O.K.SOKOLOV and A.I.BELYAEV
(1336)	687	Effect of alloying additions on the electrical properties of the tensometric palladium-silver alloy Pds-36 N. L. PRAVOVEROV and E. M. SAVITSKII
(1343)	691	β -Mn-based solid solutions in the Mn-Co(Ni)-Si ternary systems Yu. B. KUZ'MA
(1349)	694	Vapour pressure of the chlorides of lanthanum, cerium, praseodymium, and neodymium G.I. NOVIKOV and A.K.BAEV
(1353)	996	Pressure and composition of the saturated vapour over melts of the KCl-LnCl ₃ system G.I. NOVIKOV and A.K. BAEV
(1360)	700	The condensation of soid sodium phosphates N. M. DOMBROVSKII
(1366)	703	Reactions between dry cadmium sulphide and selenium dioxide powders R.I.SMIRNOVA and L.Ya.MARKOVSKII
(1370)	708	Reactions of niobium pontachloride with sodium and potassium chlorides A.P.PALKIN and N.D.CHIKANOV
(1377)	709	M ₂ SO ₄ —CaSO ₄ binary systems V. E. PLYUSHCHEV
(1382)	712	Cs, Pb Cl, SO ₄ adiagonal inreversible reciprocal system A.G.BERGMAN and G.N.MASLENNIKOVA
(1387)	714	Equilibrium diagram of the BaCt ₂ -MgCl ₂ -NaCt system N.V.BONDARENKO
(1394)	718	Fusion diagram of the potassium, lithium, fluoride, pyrophosphate reversible—reciprocal system A.G.BERGMAN and V.P.GORYACHEVA
(1399)	720	Equilibrium diagram of the Ba, Ca, K i Cl ternary system G.A. BUKHALOVA and V. T. BEREZHNAYA
(1403)	722	Physicochemical investigation of the AlCi ₃ -NaCl-WCl ₄ and FeCl ₃ -NaCl-WCl ₄ systems B.G. KORSHUNOV and L. A. VYRSKAYA
(1408)	724	Tetrahedrating sections of the Ca, K, Na & Cl, F reciprocal quaterarry system G.A. BUKHALOVA and G. N. MASLENNIKOVA
(1415)	747	Joint solubility of osesium and sodium iodides R.G. SAMUSEVA, V.E. PLYUSHCHEV, and R.S. EGOROVA
(1418)	729	Solubility isotherm, viscosity, and specific gravity in the beryllium sulphate-urea-water system at 30° K.SULAIMANKULOV
(1421)	730	Reaction of urea with barium bromide in aqueous media A. Ya. DEICH
(1424)	731	Solubility isotherms of the KNO ₂ -NaNO ₂ -H ₂ O, Ba(NO ₂) ₂ -NaNO ₂ -H ₂ O, and Ba(NO ₂) ₂ -KNO ₂ -H ₂ O systems at 25° and 50° P.I. PROTSENKO and O. N. SHOKINA
(1431)	735	Complex formation in the BeSO ₄ -CH ₂ CONH ₂ -H ₂ O system E. A. GYUNNER
Ava	ilabl	Le From Chemical Society

Soviet Physics TECHNICAL PHYSICS

A Translation of the "Zhurnal Tekhnicheskoi Fiziki"

(Russian Original Vol. 32, No. 9, pp. 1037-1156, September, 1962)

Vol. 7, No. 9, pp. 759-854

March, 1963

CONTENTS

	PAGE	RUSS. PAGE
Magnetic Deflector, A. V. Popov, P. V. Smirnov, and I. A. Shukuilo	759	1037
V. A. Moskalev and B. V. Okulov	761	1040
Structure of Nonlinear Plasma Waves, V, N. Tsytovich	763	1042
Conical Plasmoid Source, Yu. S. Azovskii, I. T. Guzhovskii, B. G. Safronov,		
and V. A. Churaev	768	1050
Determination of Plasma Transport Coefficients by the Grad Method, M. V. Samokhin,	772	1055
Stationary Quasi-One-Dimensional Magnetogasdynamic Flow with Finite Conductivity.		
R. I. Khrapko	778	1063
Structure of the Plasma Jet from a Pulsed Discharge. L. I. Grechikhin and L. Ya. Min'ko	784	1072
Probe Investigation of Ionization in Spherical Flames. E. S. Semenov and A. S. Sokolik,	788	1074
Structure of the Column in an Argon Arc. I. Local Electrical Characteristics		
of the Column, V. F. Kitaeva, V. N. Kolosnikov, V. V. Obukhov-Denisov,		
and N. N. Sobolev.	796	1084
Structure of the Column in an Argon Arc. II. Radius of the Column and Shape of the		
Radial Distributions, V. N. Kolesnikov and N. N. Sobolev	801	1090
Measurement of Electrical Conductivity in Gas Streams, K. V. Donskoi, Yu. A. Dunaev,	***	••••
and A. I. Prokof'ev	805	1095
Experimental Investigation of the Conductivity of the Combustion Products	000	
of Methane - Oxygen Mixtures Containing an Alkaline Metal, E. P. Zimin,		
and V. A. Popov	808	1039
On the Limits of Application of the Spiral Waveguine inlethed for Measuring		
the Dielectric Permittivity of a Substance. K. P. Yatuk, V. P. Shestopalov,		
and V. A. Lyashchenko	811	1 102
On the Theory of the Surface Effect in Ferromagnets for a Nonsinusoidal Field,	011	
A. Z. Vekiler and N. V. Pen'kov	813	1104
An Investigation into Ferromagnetic Resonance in Some Ferritos in the Centimeter and	0.0	110-
Millimeter Range of Waves. D. I. Mash and A. P. Ovechkin.	820	1115
The Theory of Molecular Flow. II. Passage Through Ducts of Arbitrary Form.	020	****
V. I. Lozgachev	827	1123
The Equations for the Density of Molecular Flow, O. German	B34	1134
A Cesium Vapor Diode, T. L. Matskevich	838	1139
Main Electron - Optical Properties of Transaxial Electrostatic Systems.	000	1100
	841	1142
A, M. Strashkevich	041	1145
BRIEF COMMUNICATIONS		
A Strong Pulse Magnetic Field in a Small Solid One-Coil Solenoid, G. A. Shneemon	848	1153
Available From Amer Inst of Phys		
Sov Phys - Tech Phys		

Soviet Physics TECHNICAL PHYSICS

A Translation of the "Zburnal Tekhnicheskoi Fiziki"

(Russian Original Vol. 32, No. 10, pp. 1157-1284, October, 1962)

Vol. 7, No. 10, pp. 855-950	April	, 1963
CONTENTS		
		RUSS.
Static Boundary Problems for a Hollow Cylinder of Finite Length, Part II, Numerical	PAGE	PAGE
Results, L. A. Vainshtein	855	1157
Staric Boundary Problems for a Hollow Cylinder of Finite Length, Part III. Approximate		
Formulas, L. A. Vainshtein	861	1165
A New Method for Solving the Problem of Diffraction of Electromagnetic Waves		
by a wedge with Finite Conductivity. N. N. Lebedov and I. P. Skal'skaya	867	1174
Magnetic Sounc in a Hot Plasma, Part 1. Propagation Across the Magnetic Field		
and Dissipation Due to Collisions. V. D. Demidov, D. A. Frank-Kameneuskii,		
and V. L. Yakimenko	875	1184
Properties of Magnetic Surfaces in Helical Magnetic Fields, V. G. Zykov.		
B. P. Il'enko, E. M. Lats'ko, I. A. Stepanenko, A. M. Ternopol, V. T. Tolok,		
and K. D. Sinel'nikov	879	1190
Diffusion of Charged Particles in a Dense Plasma in a Magnetic Field.		
A, I. Anisimov, N, I. Vincgradov, V, E, Golant, and B, P, Konstantinov	884	1197
Investigation of Plasma Diffusion in a Magnetic Field, S. G. Alikhanov, A. V. Komin,		
G. G. Podlesnyi, and G. L. Khorasanov	890	1205
Stability of a Tubular Pluch. V. V. Vladimirov and P. M. Marchuk	895	1212
Determination of Plasma Parameters in No-Hg Mixtures, K. S. Mustafin	000	1010
and V. I. Protasevich	808	1216
Energy Distribution of Electrons and lons in a Strong Toroldal Discharge,	063	1000
E. A. Lobikov and A. I. Nastyukha	963	1223
Prebreakdown Conduction between Electrodes in Ultra-High and High Vacuum.	000	1000
L. I. Pivovar and V. I. Gordienko Use of Pandom Modulation of Parameters in Cyclic Accelerators and Analogous	908	1230
	913	1237
Systems, A. A. Kolomenskii and A. N. Lebedev	913	123
Yu. S. Korobochko and K. S. Shilkov	919	1248
Penetration of a High-Frequency Traveling Magnetic Field in a Plasma.	010	1670
R: A. Demitkhanov, N. I. Leont'ev, V. V. Logvinov, and Yu. K. Udovichenko	921	124
Energy Loss of a Charge Moving in Vacuum over a Plasma. F. G. Bass, S. I. Khankina.	341	7 674
and V. M. Yakovenko	926	125
The Thermionic Emission of Metals in an Atmosphere of Various Gases,	020	1 60
Ya. M. Fogel', L. P. Rekova, and V. Ya. Kolot.	929	125
The Thermionic Emission of HfB2, HfC, HfO2, VC and a Solid Solution of (UC), (ZrC)4.	040	1 60
T. L. Matskevich, A. P. Kazantsev, and T. V. Krachino.	934	126
Kinetic Theory of the Low-Density Plasma Dinde. R. Ya. Kucherov and	***	-20
L, É, Rikenglaz	941	127
Available From Amer Inst of Phys		
Sov Phys - Tech Phys		
Vol VII, No 10		

AUTHOR INDEX

- A -	
-------	--

Al-1 1 u		- •	
Abel-Larson, H.	154	Babayev, V. I.	96
Adda, Y.	167	Babskiy, Ye. B.	88
Adrianov, (), S.	90	Baburina, E. A.	88
Afra, Dennes	92	Badilian, B.	167, 168
Aganyants, Yo. K.	85	Bagrov, N. A.	109
Ageyev, I. Z.	124	Bajan, Konrad	37
Agre, A. L.	84	Bakalov, Vasil P.	23
Ailloud, J.	153	Bakhman, N. N.	136
Aketa, Y.	148	Bakhvalov, Yu. A.	126
Akulinichov, I. T.	82	Bakinova, L. G.	86
Albrecht, Jerzy	34	Balandin, A. A.	152
Alekperov, S.	79	Balinskiy, D.	10
Alekseyev, S. M.	75	Balint, Jozsef	33
Aleskovskiy, V. B.	96, 98	Balkanski, Stephan	20
Alimarin, I. P.	96, 163	Balkind, Ya. V.	75
Alimov, R. Z.	107	Balla, Forenc	31
Aliyevskiy, B.	117	Bal'shin, M. Yu.	136, 137
Almasy, Gedoon	32	Barac, Dako	49
Alov, A. A.	128	Baranov, I. B.	ì
Al'port, Ya. L.	75, 109	Baranova, Yu. P.	18
Altenburger, P.	119, 132	Baranovskiy, V. V.	77
Amiro, I. Ya.	134	Barashkov, G. K.	83, 95
Andolisok, Lidija	53	Barbarina, T. M.	122
Andriyanov, A. S.	14	Bardagov, G.	6
Anishin, N. S.	162	Barjaud.	61
Anpilogov, R.	7	Burlybayev, Kh. A.	161
Ansolin, F.	99	Baron, V. V.	137
Antal, P.	170	Barrenu, P.	154
Antoniowicz, Tomasz	35	Barth, Nikolaus	171, 172
Aprodov, V. A.	69	Burtnicki, Marian	36
Armbrustor, W.	170	Bartocci, Enzo	60
Arnol'd, V. N.	150	Bartonicek, Robert	141
Aroyo, Zhak	21	Baryla, Jozef	51
Artamonov, A. Ya.	136	Basara, Dusan	
Artsimovich, L. A.	164		46 159
Arzumanyan, G.	10	Baskakov, A. P. Basko, P. T.	
Asboth, O.	78	Bastius, II.	140 146
Astashenkov, P. T.	i		
Atsarkin, V. A.	117	Bauer, Albert	74, 112
Atsumo, Ilideo	173	Bauer, O. N.	82
Aubeau, R.	99	Baule, II.	132
Avdonin, A. A.	77	Bauman, N. E.	176
Averbach, II.	100	Eaussart,	112
Ayurzanayn, B. A.	162	Baxa, J.	25
Ayzerman, M. A.	123	Bayevskiy, R. M.	82, 86
. Was a more and the con-	***	Bayseitov, R.	8
		Bayukov, Yu. D.	114
		Bazhanov, B.	10
		Bbjeskov, G. K.	150
		Beck, 11.	102
		Behrisch, R.	170

- 249 -

Beirau, E.	27	Bodasinski, Boleslaw	37	
Bekenov, T.	3	Bodnar, Artus	35	
Belikov, V.	75, 76	Boeru, S.	43	
Belinkiy, A. L.	6	Boesch, Hans	81	
Bellier, Jean	154	Bogakovskiy, N. A.	140	
Bellion, B.	103	Bogatyrev, V. K.	152	
Belousov, L. V.	90	Bogolyubov, N. N.	163	
Belova, I. N.	122	Bogoyavlenskiy, A. N.	87	
Belova, O. M.	85	Bogush, O. I.	105	
Belyakin, N. V.	124	Bolek, M.	131	
Belyanskiy, V. B.	75	Bolgikh, I. P.	87	
Belyayev, L. M.	139	Bol'shakov, L. I.	137	
Belyi, V. D.	136	Boltyanskiy, V. G.	157	
Bondor, Ottmar	169	Bolyunova, A. D.	161	
Boraru, P.	55	Borchardt, H.	112	
Borcot, P.	119, 132	Boroskov, G. K.	95	
Berdichevskiy, L. S.	91			
Beregovoy, L.	9	Borisenko, A. I.	157	
	116	Borisov, N. A.	12	
Borozovskiy, A. F.		Bornert, II.	101	
Borgfeldor, B.	144	Borodavkin, M.	8	
Borlin, A. A.	97	Borodulin, A.	3	
Borno, L.	110	Boros, Gabor	31	
Boshenkovskiy, V.	.5	Borovik, Ye. S.	95	
Bespalov, V.	17	Borrov, V. M.	116	
Botov, II.	114	Borzonko, Artom	19	
Bottziech, P.	169	Bothorel, Piorre	99	
Bettzioche, P.	132	Botigh or, H.	144	
Botzhold, E.	132	Botkin, P. P.	158	
Beynler, M.	167	Botvinik, M. M.	116	
Boy-Biyonko, G. Ya.	89	Bourgeois, M.	134	
Beylina, L. V.	138	Bove, H. G.	116	
Bianchi, R.	93	Bozero, V.	42	
Bidaut, J.	62	Braams, R.	167	
Bion, Jerzy	50	Brandis, S. A.	85	
Bionezak, Jan	121	Branik, Julius	27	
Biichel, E.	143	Braudo, A. A.	158	
Birer, V. I.	42	Brauer, G.	168	
Birger, G. Ye.	7	Brauer, H.	169	
Birjukova, L. A.	108	Braun, N. P.	136	
Biryukov, V. Ye.	14	Brenman, M. A.	71	
Biryulin, A. P.	131	Brinkmann, W.	81	
Biryuzov, S. S.	52	Brovchenko, V. G.	114	
Biske, S. F.	18	Bruck, L.	168	
Blanaru, Mircea	43	Brun, E.	169	
Blass, Bronislaw	34	Buchi, G.		
Blaus, I.	17	Buckel, W.	103	
Bliney, I. V.	96	Buckel, Werner	171	170
Blom, L.	142		171, 1	1/2
Bobrik, P. I.	135	Budzinski, Karol	93	
	110	Bujok, Jozef	37	
Bobrov, L.		Bukhnan, S. V.	161	
Bobrov, N. I.	85 160	Bulaceanu, M.	44	
Bobrov, V. N.	159	Bulow, Hagen	171	
Bobrowski, Czeslaw	37	Bungardt, K.	146	
Bocharov, Yu. P.	6	Bunge, H. J.	144	
Bochmann, Klaus	29	Bunge, Hans-Joachin	102	

Bunz, V. I.	106		Crome, R.	144	
Burda, S.	141		Cucui, N.	44	
Burov, A. I.	17		Cupr, V.	101	
Burtsev, E. F.	123		Czerch, W.	100	
	151		Czyhiryn, Mieczyslaw	37	
Buslayev, V. S.	163		02/111/11, 111002/014	01	
Buslenko, N. P.		•			
Buttinelli, D.	173		- D -		
Bykov, S. B.	162		- 1/ -		
			De los estadad A. C.	170	
_			Dadunashvili, A. S.	130	
- C -			Dahn, H.	101	
			D'Ambrosio, Antonio	60	
Cadariu, G.	55		Danchev, Pancho	46	
Carafoli, Elie	79		Danilov, F.	3	
Carbonnell	112		Daniyelyan, A. M.	135	
Caratheodory, C.	151		Dan'shina, N. M.	96	
Castellanos,			Darski, Stanislaw	40	
Edelmiro S.	73		Daskalov, Khristo	22	
Chakalev, K. N.	159		Davidesco, D.	81	
Chalukov, Aleksandur	47		Davydov, Yu. P.	135	
Chapskiy, K. K.	88		Davydova, M. A.	161	
Chavchanidze, V. V.	106		de Gregorio, G.	173	
Chekalov, L.	10		Degrois, H.	167,	168
Cherkasov, Yu. A.	141		Deiss, W. J.	142	
Cherkesov, L. V.	166		Dekhtyar, I. Ya.	135	
Cherkez, A. Ya.	126		de Kkeyn, A.	91	
Chernov, A. A.	139		Delcroix, Andre	59	
Chernyavskiy, G. A.	108		Deliabaltov, I.	44	
	11		Deryagin, B. V.	96	
Chesnokov, N. Ye. Cheyshvili, A. N.	80			142	
	42		Desestret, A.	142	
Chitic, I.	70		Dessain, R.	146	
Chice, Chang-sok	70		Deutsch, V.	128	
Chice, Song-gun			Devnin, S. I.		
Chice, Sung-hun	67 65		Dialer, K.	101	
Chong, Yon-uk	65 71		Dido, Mario	60	
Chou, Liang-hsiao	71		Dimaksyan, A. M.	109	
Chou, Li-san	64		Dinerman, A. P.	129	
Chou, Yu-wu	69		Djuric, Djordje	47	
Chrabaszoz, Roman	36		Dmitriyev, A.	17	
Christiansen, J.	170		Dmitriyevskiy, A. A.	75	
Chumak, V. I.	90		Dobrev, Geno	21	1 -
Chutov, Yu. I.	175		Dobrichovsky, Zdenek	78	
Chuvashayev, A.	4		Dobrova, N. B.	86	
Cipek, Karel	25		Dobrovic, Silvestar	49	
Coen, Faderico	60		Dodogorskiy, N. A.	12	
Cohen, L.	154		Dolenko, A.	117	
Coic, Y.	81		Dologne, M.	58	
Coloccis, E.	102		Domaradskiy, I. V.	88	
Coriou, II.	99,	142	Dommanget, J.	112	
	143		Doroshin, I.	9	
Cornel, J.	142		Dorfman, A. Sh.	129	
Craiu, Ion	43		Dorr, W.	147	
Crkvenjakov, I.	93		Dovgalevskiy, Ya. M.	139	

- 2回貨費の開発的の (Province Control Contro

・ こうとうことの 一連り から その最初を記れておりはなか 一致 かられたいかいことを使みる基準の最終的で 東京政策 で のぼうなをあっ の間をなってのこのほうしゅうしゅうしゃく

1丁では突然盛慶遠遠渡のとう ライン

		m 1 - 1/ 1/	164	
Dovzhik, S. A.	130	Fesenko, V. V.	164	
Dozorov, A.	17	Feygin, L. !!.	6	
Drakin, I. I.	126	Fick, Bronislaw	34	
Drakulic, P.	79	Figini, R. V.	102	
Drexler, Zbigniew	36	Filatova, N. A.	140	
Drisgalovich-Egorova,		Filipowicz, Eugeniusz	40	
S. E.	87	· Filippov, N. V.	160	
Drogaytsev, A. D.	86	Firstov, V. G.	107	
Drude, P.	143	Fischer, W.	146	
Dubcek, Alexander	26	Fischer, W. A.	144	
Dubinina, Ye. M.	161	Fisher, Fred	171	
Dubinskiy, N.	8	Fiti, II.	155	
Dubrovina, Z. V.	35	Fitzer, E.	155	
	136	Flerov, B. A.	89	
Dubrovskiy, A. P.	90	Fleyshman, F.	4	
Dubrovskiy, Yu. A.	99	Foache	118, 1	19
Duca, A.	41	Foerster, M.	145	
Dudzinski, Wladyslaw	134	Fomenko, F. N.	122	
Dulov, V. G.		Fonick, F.	121	
Dumov, V. I.	129	Frank-Kanenetskiy, D. A.	105	
Dundr, M.	24		171	
Duplenko, K. F.	93	Frenkel, J.	35	
Dusan	53	Frenkol, Izaslaw	100	
Dyja, Ryszard	56	Freytag, H.	59	
Dziewonski, Marian	36	Fricke, Karl Wilhelm		
		Fridman, V. I.	17	
		Friedman, I.	112	
- E -		Frohberg, M. G.	147	
		Fromer, Miloslav	47	
Eiehstadt, J.	27	Fruhauf, K.	100	
Ejima, N.	149	Fruman, I. I.	123	
		Frumkin, M. L.	86	
Eminger, Z.	141	Fujii, R.	149	
Emmerich, II.	2.7	Furer, M. M.	83	
Engel, H. J.	148	Furuta, Tomohiko	156	
Engmann, U.	170	Futterknecht, R.	154	
Enomoto, Shigemasa	156			
Epshteyn, O. V.	93			
Erinov, A. E.	139	- G -		
Ermolayeva, V. G.	165			
Ermolovich, Yu. B.	139	Gabryl, Stanislaw	34	
Eulenberger, G.	101	Gadzhalski, Iliya	56	
Edichberger, (i.		Galkin, V. S.	160	
		Galkina, N. K.	97	
- F -		Gall, Imre	32	
•		Gallardos, R.	71	
Fauconneau, G.	81	Gal'perin, Yu. I.	106	
Feder, Alfons	34	Gamkrelidge, R. V.	157	
Federov, G. B.	142	Gandel'sman, A. B.	90	
Federov, G. B. Federchenko, I. M.	139, 140	Gapochka, M. P.	89	
	9, 10,	Garanina, L.	79	
Fedorenko, N.	14	Garber, Ye. D.	125	
Fodotov Vy	86	Gdynia, Jerzy	34	
Fedotov, Yu. Feldtkeller, Ernst	172	Gebauhr, V.	155	
Fenin, Yu. I.	152	Gebicki, Zbigniew	40	

Gela, Csikos-Nagy	31	Grajter, Jerzy	40	
Gel'd, P. V.	6	Grall, L.	142	
Geller, Yu. A.	135	Gramberg, G.	172	
Gengnagol, H.	147	Gramberg, I. V.	105	
Geoffrey, R.	131	Graul, E. II.	154	
Gershuni, I. M.	123	Gravin, A. I.	98	
Gertsriken, S. D.	135	Grechukhin, A. I.	127	
Getsov, L. B.	129	Gref, Jindrich	26	
Gil'berg, L.	11 165	Greifswald	54 146	
Ginzburg, V. L.	122	Greis, F. Graniowski Marak	174	
Ginzburg, V. M.	93	Greniewski, Marek Grenishin, S. G.	141	
Glusti, C. Gladkov, D. I.	117	Grigoryan, G.	10	
	164	Grigor'yev, A. T.	141	
Glaunshtoyn, I. M. Glazov, N. V.	153	Grubacevic, Pero	49	
Glazov, V.	108	Gruia, Mignon	55	
Globov, I. A.	116	Grzeszczyk, Kazimierz	156	
Glemsor, Oskar	101	Gubarev, A. V.	126	
Gligorevic, Rajko	46	Gubenkov, N.	3	
Gligorevic, Slavko	24	Gubin, V. I.	105	
Glikman, Pavol	20	Gugunava, G. Ye.	108	
Globus, A. M.	113	Guicciardi, D.	57	
Glowink, B.	100	Guminski, Z.		78
Glushkov, V. M.	151	Gurovich, A. G.	114	
Gnewaszewski, Jorzy	34	Gurovich, Yu. G.	137	
Gooroog, S.	102	Gusev, I. M.	122	
Gogin, G.	17	Gusov, L. Z.	123	
Gogolov, I. G.	127	Gusov, N. M.	128	
Gelidenberg, S. A.	160	Gushchin, G. P.	110	
Golonkov, A. N.	125	Gustkov, G. Yn.	107	
Golikov, S. N.	82	Gus'kova, I. L.	163	
Golovkin, V.	10	Gusyov, L. M.	16	
Golub, I. Ya.	136	Gusz, Sykstus	51	
Golubov, V. A.	160	Gutierroz, Rogolio	72	
Golumskiy, S. A.	18	Gutowski, Antoni	55	
Golutvina, M. M.	89	Gvishiani, D.	7	
Goncharenko, M. N.	76	Gzovskiy, N. V.	106	
Goncharov, V.	8			
Goncharova, Yo. Yo.	75			
Gonsior, B.	112	- il -		
Gontayeva, A. A.	87			
Gorbis, Z. R.	127	ila, Ko Tan	66	
Gorbunova, K. M.	115	Ha, Van	66	
Gordeyeva, H. N.	97	Hafner, S.	169	
Gorclik, S. S.	137	Hamaguchi, II.	103	
Gorlev, M.	9	Hamilton, E. H.	146	
Gortzak, Honk	58	llan, Ju-lin	71	
Goryaga, G. I.	165	Han, Pyong-op	65	
Goryuntef, Yu. V.	136	lian, Yong-kun	68	
Goshchitsky, B. N.	158	llandge, P.	154	
Gosiewski, Wladyslaw	174	llanszen, K. J.	172	
Covelante P P	91	Haroche, Charles	59	
Goydenko, P. P.	12 1	Hasogawa, M.	149	
Gozulov, A. I. Grabowski. Z. R.	173	Hasse, Jorg	172	
GROUNSKI, & R.	1/3	Hatos, Emil	42	

 $\mathbb{E}_{\mathbb{R}} \mathbb{R}^{n} \left(\mathbb{R}^{n} \right) = \mathbb{E}_{\mathbb{R}^{n} \times \mathbb{R}^{n} \times \mathbb{R}^{n} \times \mathbb{R}^{n} \times \mathbb{R}^{n}} = \mathbb{E}_{\mathbb{R}^{n} \times \mathbb{R}^{n} \times \mathbb{R}^{n} \times \mathbb{R}^{n} \times \mathbb{R}^{n} \times \mathbb{R}^{n}} = \mathbb{E}_{\mathbb{R}^{n} \times \mathbb{R}^{n} \times \mathbb{R}^{$

Baualia V	147	Istratov, A. G.	158	
liaucke, M.	133	Itaoka, T.	148,	140
Haupt, Tadousz	154	Ivakhnenko, O. G.	177	143
Hauser, R.	33	Ivanchenko, V. A.	161	
Havas, Bela			159	
Heberger, Karoly	54	Ivanov, K. P.		
Hecht, Ch.	26	Ivanov, V. M.	157	
Meins, W.	78	Ivanov, V. S.		123
Hekker, R. C.	61	Ivanovic, Milun	45	
Hengstenberg, H.	132	Ivanovic, Miomir	118	
fleymons, R.	92	Ivanov-Kholodnyi, G. S.	159	
Heynert, G.	146	Ivanovna, Ye. P.	7	
Hilsch, R.	171	Ivantsov, I. G.	139	
Hiroshi, Kubo	152	Ivashin, M. V.	84	
Hirota, Sadao	173	Iyevlev, V. N.	160	
Hlavnicka, J.	25	Izakov, M. N.	109	
lioff, Tadeusz	35	Izard, C.	81	
Hofman, O.	26	Izosimov, A. V.	13	
Hooke, Siegfried	30	Izrailevich, I. S.	158	
Horalck, Vladimir	25	Izwumov, N. M.	115	
Horn, V.	146			
Horodko, Henryk	36			
Hosoi, Y.	149	_ J _		
Hsu, Hsin-hsuch	64	- 3 -		
	24	Tablonalii Honnuk	4.1	177
Hubl, Jiri		Jablonski, Henryk	41,	1//
Huettanrauch, Willy	26	Jaeger, G.	132	
Hug, 0	113	Janker, R.	120	
Humek, Tadeusz	40	Jankovic, Vasilije	36	
Hure, J.	143	Janosi, Ferenc	33	
Hurron, B. J.	7S	Janota, J.	71	
Husner, V.	25	Janozevic, Dusan	46	
Husner, Vaclav	26	Jaroslavski, Jan	16	
Huu, Duc	66	Jedlicki, Witold	48	
Huwe, R.	28	Jedrychowski, Stefan	35	
•		Jelkovic	53	
		Jevtic, Zivorad	23	
- I -		Johanson, Svend	53	
		Jovanovic, Batric	23	
Ibragimov, M. Kh.	158	Jozsef, Erdei	32	
Ignatkin, Ivan Alexsand	17	Juda, Jan	93	
Ignatyev, K. G.	114	Juget, Ph.	143	
Il'chenko, O. T.	129		•	
Il'in, B. V.	117	Jurkiewicz, J.	104	
Il'in, I. P.	116	Justi, E.	170	
Ilyichev, L. F.	68	Juvancz, Ireneusz	176	
Ilyushin, V.	4	Javanez, Frenedsz	170	
Imazu, S.	103			
		·		
Imberg, S.	42	- K -		
Inhof, Ed.	61			
Ioan, Constantin Sabin	79	Kabalaliyev, Yu.	10	
Iodko, E. A.	137	Kabonov, V. V.	126	
Isagulyants, G. V.	152	Kachur, L. A.	\$3	
Isayav, I.	7	Kaczmarczyk, Leszek	40	
Isayenko, N.	4	Kadkin, V. A.	118	
Isayev, V. F.	138	Kadlek, K.	91	
Ishkov, A.	9	Kagaku, Bumoski	173	

			150
Kakutani, T.	149	Khranchenko, V. N.	150
Kalinin, E. V.	116	Kh rgi an, A. Kh.	108
Kaliski, S.	174	Khristov, Petur	52
Kallistratova, M. A.	110	-Khronov, P.	14
Kamayev, V.	15	Khurgin, Ya. I.	150
	38	Khvostikov, I. A.	109
Kamerski, Stefan	70	Kichanova, I.	19
Kang, Pyong-sik		Kim, Ch'ol Hun	67
Kang, Yong-tak	67	_	67
Kantorovich, B. V.	157	Kim, Il-song	65
Kao, Tsu-shun	176	Kim, Man-kum	
Kapitsa, P. L.	114	Kim, Pyong-je	70
Kaplyanskiy, A. Ye.	124	Kireyev, N. N.	128
Kanustinskiy, A.	80	Kirillin, V. A.	164
Karandeyeva, O. G.	\$2	Kirillov, I. I.	124, 127
Karaulov, A. N.	123	Kirlian, S. D.	165
Karavayev, G.	6	Kirlian, V. Kh.	165
	60	Kirpichnikov, I. V.	114
Karlsson, Erik	133	Kiselev, O. N.	87
Karoly, Fukker			75
Karolya, I. L.	152	Kisetova, M. V.	138
Karov, B. G.	95	Kislyakov, I. P.	
Karpenko, O. M.	89	Kitayev, B. I.	138
Karpenko, S.	6	Klanke, P.	73
Karpikhina, I. N.	94	Kleber, W.	170
Karulin, Ye. T.	131	Kleinenberg, S. E.	84
Karuna, Ye.	10	Kleinert, K.	27
		Kleteka, Z.	141
Kastrov, V. G.	108		60
Katel, Piotr	52	Kleven, Hans I.	
Kats, L.	9	Klevezal, G. A.	84
Katsourides, G.	63	Klimontovich, Yu. L.	158
Kawalkowski, Al.	48	Klinkowski, M.	28
Kawinski, Stanislaw	36	Klyachkin, A. L.	126
Kazakova, T. A.	89	Knop, Hans	29
Kazanskiy, A. B.	108	Kobayashi, Iwao	156
Kazhinskiy, B.	117	Kobayashi, Setsuo	156
_	151	Koblovsky, V.	141
Kazymov, A.	84, 88	Koborov, N.	13
Kedrov, A. A.			101
Kedrov, B. M.	87	Koch, O. G.	
Kegel, K.	145	Kocherczhkin, V. G.	86, 153
Kelbg, G.	169	Kodochigov, Petr	150
Keller, Laszlo	33	Nikolayevich	152
Kenenesy, E.	145	Koenen, II.	100
Kerblay, T. S.	111	Kohler, M.	170
Keyel, N. P.	150	Kohout, Jaroslav	25
Keyer, N. P.	95	Koiva, A.	57
Khachikyan, V. Ye.	10	Kolandzhiev, Tsvetan	20
Khailov, K. M.	107	Kolbanovskiy, V. V.	15
	164	Kolesnikov, N. N.	165
Khalatnikov, I. M.	165	Kolesov, G. M.	94
Khaletskiy, H. H.			98
Khar'kov, Ye. I.	175	Koller, A.	130
Kheinman, A. S.	165	Kolokol'tsev, N. A.	
Khenven, A. R.	125	Kolonitskiy, P.	19
Kheyfets, Yu. B.	83	Kolotyrkin, V. M.	98
Khil'mi, G. F.	89	Komaki, Shumichi	156
Khitrin, L. N.	157	Kondrat'yev, K. Ya.	106
Kholyavko, S.	19	kopylov, 1. ii.	108
Khotevich, V. I.	159	Kopylov, I. S.	126
•		• • •	

- A A COLD COLD TO THE COLD

Managed at 1 A	138	Kudrin, O. I.	75
Kopyrin, I. A.		Kudrina, S. A.	i 15
Korablev, L. N.	114	Kudryavtsev, E.	3, 14
Korkisch, J.	170		124
Korneyev, V. L.	135	-Kudryavtsov, M. V.	
Kornienko, A. H.	124	Kuhl, Walter	120
Kornil'yev, N. V.	80	Kukarkin, A. S.	138
Korolev, V. V.	103	Kukhtenko, O. I.	151
Korol'ov, A. M.	175	Kulik, I. L.	107
Korovushkin, A.	2	Kuliyev, A. M.	94
	128	Kuliyev, R. Sh.	96
Korzh, P. I.	141	Kumisishvili, V. A.	106
Roselev, V.	75	Kunnos, G. Ya.	123
Koshevov, V. N.		Kuptil', A.	17
Koshmarov, Yu. A.	160	Kurkin, S. A.	123
Kosielski, Romuald	121	Vermonlish D A	16
Kostenko, P. P.	125	Kurochkin, P. A.	114
Kostyakov, V. I.	139	Kurochkin, S. S.	
Kostychev, G. I.	76	Kutateladze, K. S.	151
Kostyra, Wladyslaw	38	Kutovoy, D.	8
Kotel'nikov, V. A.	107	Kutsenko, S. P.	12
Houtsky, Zdenek	167	Kuzinski, Stanislav	37
Kovacs, Istvan	31	Kuzimenko, P. P.	175
	31	Kuzimichev, R. B.	124
Kovacs, S.		Kuznetsov, L. A.	108
Koval'chenko, N. S.	127, 163		130
Koval'chuk, V. S.	175	Kuznetsov, L. I.	
Kovalev, N.	14	Kuznetsov, S. G.	82
Koval'kov, G. A.	117		
Koviza, A. N.	109		
Kowalski, Janusz	36	- L -	
Kozarzhevskaya, E. F.	85		
Kozel'cheva, V. F.	111	La, Xuan Dinh	66
Kozhov, M. M.	84	Lacombe, P.	143
Koziej, Marian	35	Lagerberg, C. S. I. J.	65
	37	Lagutkin, V.	7
Kozikowski, Henryk	15	Landau, L. D.	165
Kozlov, F. R.			145
Kozlov, I. A.	127	Langbein, G.	15
Kozubovs'kyy, S. F.	177	Lapin, V. B.	94
Kramer, Josef	133	Lapshin, B. M.	
Krasheninnikov, I. S.	114	Lapshinov, A. H.	116
Krasil'nikov, Yu. I.	75	Larionova, Ye. V.	14
Kratsch, Ottomar	30	Latsis, O.	2
Kraut, A.	155	Laura, Magyar	148
Kraut, H.	146	Laurent, Raymond	62
Krautmacher, II.	147	Lavrik, M.	15
Kravchuk, L. V.	140	Lavrov, I. I.	138
Krayzmer, Leonid	- '	Lavrukhina, A. K.	94
Paylovich	82	Laykhova, L. N.	110, 111
		Lazar, Tr.	44
Krisch, A.	147	Lazitch, Branko	66
Krol, Boleslaw	35 51		79
Krolikiewicz, T.	51	Lebedonko, L. A.	127
Kruithof, A. J.	142	Lebedev, I. V.	
Krupinski, Boleslaw	39	Lebedeva, 2.	80 65
Krylov, N. V.	160	Lee, Pong-hyon	65
Krylov, O. A.	90	Lee, Sang-son	65
Kubo, Hiroshi	121	Lee, Sok-nok	65
Kubovic, Branko	46	Lee, Susana	7.5
	0.1	Lefebvre, J. M.	81
Kucheryayev, Yu. A.	94	nording to a	C: 1

Leger, J. E.	102		Lukosz, W.	168	
Leger, P.	154		Lunarskiy, G. N.	109	
Lehfeld, W.	169		Lund, Gelius	58	
Lehr, K.	145		Lunts, G. L.	161	
Leiner, Franz	133		Lur'ye, A. I.	129	
	100	,	Lurye, A. L.	150	
Lelebret, Rafeal	71		Lusnikov	50	
Sanchez	71				
Lemnij, I.	44		Lyakhov, G. H.	130	
Lenkow, W.	121		Lyapin, A. G.	117	
Leonhard, Wolfgang	16		Lyapunov, B. V.	75	
Leonov, A. K.	106	•	Lyarskiy, P. P.	S 5	
Leonov, G. P.	105		Lyashchenko, N. Ya.	153,	157
Leopold, Antoni	35		Lysenko, Nikolay N.	17	
LeRolland, Paul	168		Lysenko, V.	127	
	51		2,00,,		
Lesko, Teofil	62				
Lesourd, Hichel			- M -		
Letov, A. II.	150		 		
Lettau, Heinz	112				
Levina, L.	11		Machnig, 0.	154	
Levitov, V. I.	117		Mackowiak, Wlodzimderz	40	
Levitskaya, H. A.	159		Majdak, Josef	55	
Lewalski, 2.	50		Makachev, N. I.	140	
Lewandowski, Jerzy	51		Makarchenko, O. F.	93	
Li, Chien-wei	66		Makarov, O. F.	76	
	64			162	
Li, Ch-un-ling			Makhin, V. A.		
Libkind, A.	13		Malakhova, S. G.	152	
Librovich, V. B.	158		Mal'chikov, S. V.	117	
Lifshits, E. V.	141		Malkina, A. D.	96	
Lifshits, V. N.	109		Mal'tsev, V. V.	118	
Ligacheva, L.	9		Numayev, B. N.	85	
Lim, Su-ung	67		Hanescu, Manea	43	
Lin, I-chou	64		Manovich, R. M.	115	
Lindenberg, B. Ya.	123		Manevy, G.	134	
	28			95	
Lindenhayn, Otto			Mantashyan, A. A.		
Lindner, Jozsef	33		Manuylova, Ye. F.	107	
Lindner, Roland	170		Manzheyev, D.	5	
Lindner, Werner	28		Marek, Franz	59	
Linetskiy, V. F.	104		Marhol, Milan	93	
Linkin, V. N.	165		Marin, Rolando Valdes	73	
Liogon'kiy, B. I.	97		Marincek, B.	145	
Lipka, Jerzy	133		Marinescu, Constantin	44	
Lippa, A.	57		Marinescu, I.	44	
Lippert, E.	173		Marinescu, V.	55	
Liu, Chen-hsing	112		Markov, A.	11	
	176				
Liu, Yung-ch'uan			Markov, S. S.	1.	
Livshits, L. S.	139		Markov, Vasil	20	
Livshits, N. N.	83		Markovic, Bosko	23	
Loginov, V. I.	138		Markovic, Homa	5.3	
Logvin, M. A.	86		Markovic, Petar	46	
Lomakina, N. B.	88		Martin, J.	155	
Lominskiy, S. V.	131		Mart'yanov, Sergey	16	
Lozinskaya, A. II.	110		Harushkin, V.	S	
Ludwig, R.	78		Marx, Gyorgy	113	
Lukanov, Kamen	21		Maryev, D. I.	124	
Lukonina, H. K.	87		Maskow, Dietrich	48	
	.,,		TOURON, DIOCI LON	, 0	

	70		Mi ani V	148	
Mateescu, Dan	79		Nizui, K.	102	
Materic, Ilija	23		Mizushima, Y.		
Matsukura, T.	149		Mocanu, I.	42	
Matsumoto, 11.	103		Mocharnyuk, R. F.	134	
Matsushita, Y.	149		Moisil, Gr. C.	174	
Mazanet, Mihai	93		Moisv, Λ. Λ.	85	
	6		Molchanov, Ye. I.	125	
Mazo, M. D.		167	Molchanov, Yu. D.	114	
Med, A. M.		163	Moldovan, Ion	43	
Mednikov, B. H.	89			46	
Mehnert, Klaus	59		Molkhov, Yako		
Melamed, N.	47		Mo11, H.	101	
Melenevskiy, V. N.	98		Molotilov, B. V.	139	
Mel'nikov, A. P.	75		Molski, Janusz	121	
Melnikov, D. A.	125		Momcilovic	131	
Mel'nikov, L. A.	140		Monastyrskaya, A. R.	5	
	154		Monch, Winfried	172	
Mercier, J.	151		Monin, A. S.	108	
Merkulova, R. F.			Morachevskiy, Yu. V.	97	
Mestre, li.	154			175	
Meyer, G.	144		Morgulis, N. D.		
Moyer, Max	92		Morgunova, N. N.	139	
Neyer, S.	101		Morozov, A. N.	138	
Meyer-Hartwig, Eberhard	145		Morozov, D. I.	128	
Mezheritskiy, A. D.	125		Morozov, V. M.	161	
Michajlow, Wlodzimierz	40		Morskoy, G. I.	111	
	145		Mosdorf, Jerzy	34	
Michalski, F.			Moshkina, R. I.	95	
Mierzejewski, Edward	38		•	159	
Mieszczankowski,			Moskalenko, Yu. E.		
Mieczyslaw	41		Moskalenko, Yu. Ye.	85	ر
Mikhaylov, S. V.	87		Mosova, L. N.	141	
Mikhaylovskiy, G. P.	89		Mozzhukhin, Ye. I.	151	
Mikumis, S. I.	115		Mracek, Jaromir	131	
Mikunis, Shamuil	63		Mrzyglod, Tadeusz	35	
Miletic, Mileta	45		Mueller, A.	147	
	51		Mueller, Horst	168	
Milkiewicz, A.	28		Mueller, Wilhelm	92	
Miller, C.				120,	151
Millot, J. P.	153		Muhldorf, Eugen		151
Milojevic, Stojka	45		Mukhin, S. V.	114	
Milojevic, Zivomir	45		Muller, N. N.	137	
Milovankic, Miroslav	23		Muravlenko, V.	9	
Milovic, N.	93		Murgulescu, I. G.	102	
Miltenburger, H.	113		Murgulescu, Ilie	43,	55
Mindlin, L. E.	109		Murzayev, E. M.	64	
Minestsev, V. B.	77		Murzinov, I. N.	165	
Minolyubov, I. V.	126		Murzov, A. I.	135	
	51		Media 2013 716 25	20	
Miodonski, Czeslaw					
Miric, Stanko	53				
Mirkin, I. L.	139				
Mirtov, B. A.	105		•		
Misheva, Natasha	21		•		
!!itani	152				
Mitani, Kenji	121				
Nitov, Nino	22				
Mitrani, L.	114				
Mitrovic, Mihailo	49				
Mitura, Feliks	37				
	0,				

ACCEPTED TO THE CONTROL OF THE CON

Nadgornyy, E. M.	140	Oberst, Hermann	120
Nagy, Frantisek	25	Okura, A.	149
Nakai, T.	103	Olesevich, K. V.	130
Nasonov, D. N.	82	Olko, Eugeniusz	39
Naumann, Christa	101	Olkowsky, J.	154
Naumann, D.	155	Ollier, H.	143
Naumenko, A. I.	84, 88,	Olshanskaya, N. I.	163
	159	Olszak, Waclaw	54
Naumov, G. V.	18	Onishi, T.	149
Naydich, Yu. V.	164	Oparin, A. I.	86
Nazarov, M.	5, 10	Oprescu, I.	41
Nechiporuk, E. I.	115	Oreshkin, P.T.	162
Nefelova, M. V.	84	Orlov, Yu. I.	88
Negovskiy, V. A.	86	Oseka, Marian	33
Nekrasov, N.	. 7	Osipov, G. V.	15
Nemecek, Vaclav	50	Osminin, Yu. P.	166
Neporozlmiy, P. S.	117	Ostermann, F.	148
Neprochnov, Yu. P.	109	Ovchinnikov, A.	14
Nerpin, S. V.	113	Ovchinnikov, G. V.	97
Nesmeyanov, An. N.	100, 148	Ovsyannikov, N.	3
Nesterenko, L. D.	157	Oyama, Yoshitoshi	173
Nesterov, V. N.	162		
Nesterov, Ye. D.	162		
Nestorescu, Gh.	42	- P -	
Neumann, Hobert	59		
Nevaril, J.	25	Pagava, S. T.	111
Neyfakh, A.	87	Pak, Chong-gyu	65
Neyman, Z. B.	12	Pak, Chong-t'aek	70
Nguyen, Dinh Thi	70	Pak, Ki-son	67
Nguyen, Van Loc	81	Pakhomov, A. S.	94
Nguyen, Van Tran	66	Pakhomov, V.	10
Nikitin, S. A.	2	Palastin, L. M.	116
Nikitina, N. A.	107	Palfai, İstvan	33
Nikolayev, N. I.	98	Pal'guyev, S. F.	95
Nikolayev, V. S.	96	Pan, V. M.	136
Nikolov, Petur	22	Panov, D. A.	94
Nikolskiy, N.	2	Pantic, Marko	49
Nikorov, Z. S.	84	Papazov, G.	21
Nisel'son, L. A.	153	Paramonov, Yu. I.	131
Nitz, H. J.	26, 27	Parin, V. V.	76, 77,
Nomofilov, S. I.	135		86, 88,
Norlund, Ib	58		176
Nosov, B. I.	118	Parygin, B. D.	90
Nosyreva, I. A.	165	Pascard, R.	99
Novikov, G. A.	91	Paskalev, Stefan	21
Nowacki, Witold	37	Pavdernik, J.	155
Nowakowski, W.	121	Pavlov, K. V.	126
Nowotny, II.	146	Pavlova, G. L.	86
Nyunka, V.	19	Pawelski, O.	146
ity with the	4.5	i with the contract of the con	140

```
42
                                            Popper, A.
Payzulin, N.
                                                                      79
                                             Porfiriev, V.
                          53
Pecaver, Albinca
                                                                     105
                                             Porifryev, V. B.
                         111
Ped. D. A.
                                                                     141
                                            Pospekhov, D. A.
                         160
Pelevin, V. S.
                                                                     125
                                            Potapenko, A. Ye.
                         101
Pelikan, J. B.
                                                                     176
                          23
                                             Potthof, G.
Penev, Andon
                                                                     139
                                            Povolotskiy, Ye. G.
                          22
Penev, Dimitur
                                             Pozdnyak, N. Z.
                                                                     138
                          22
Penev, Petur
                                                                     140
                                             Pozin, Y. M.
                          11
Peremeyes, Kh.
                                                                      56
                                             Prelic, Milan
Pereverzev, D. A.
                         129
                                                                      45
                                             Pretorian, C.
                         119
Perlini, G.
                                             Prica, Radoje
                                                                       45
                         136
Persov, V.
                                                                      100, 148
                                             Priselkov, Yu. A.
                          37
Perun, Dymitr
                                                                      162
                                             Prisnyakov, V. F.
Peterson, O. P.
                          83
                                                                      156
                                             Procopiu, Dimitru D.
                                                                      169
Petrov, M. P.
                          69
                                             Profos, P.
                                                                      165
                                             Prokhotskiy, Yu. M.
Petrov, P. I.
                         124
                                                                       90
                                             Prokopovich, N. B.
Petrov, R. V.
                         152
                                                                       90
                                             Protasov, V. R.
Petrova, L.
                          53
                                                                       12
                                             Prudenskiy, G.
                          153
Petrusevicn, I. V.
                                                                       98
                                             Prusak, Jan
                          170
Picifier, W.
                                             Puff, Heinz
                                                                      169
Pham, Thien
                           48
                                                                      162
                                             Pukhov, G. Ye.
                           70
Pham, Van Dong
                                                                       62
                                             Pundak, Nahum
                          148
Phragmen, Gosta
                                                                       17
                          78
                                             Pyasetskaya, G.
Piatkowski, B.
                                                                      161
                                             Pyt'veva, N. B.
Pietraszewski, Marian
                           55
                          119
Pietri, G.
                           61
Pillewizer, W.
                                                         - Q -
Pilovitskaya, V. N.
                           85
                          157, 164
Pines, B. Ya.
                                             Queisser, Hans-Joachim 172
                           50
Pinkiewicz, Jan
                          108
Pinus, N. Z.
                            7
Pisarev, D.
                                                         - R -
                           72
Pittier, Henri F.
                          168
Plancherel, M.
                                                                       90
                                             Rabinovich, M. Ya.
                          101
Plaul, Th.
                                                                      160
                                             Rabinovich, V. A.
                          161
Plavnik, G. M.
                                                                      116
                                             Radchenko, V. D.
                          102
Plieth, K.
                                                                      140
                                             Radomysel'skiy, I. D.
                          140
Plotkin, S. Ya.
                                                                       54
                            3
                                             Radulescu, I.
Pogosov, I.
                                                                       84
                                             Raiko, A. P.
                          123
Pokhodnya, I. K.
                                                                      154
                                             Raimbault, P.
Pikrovskiy, G. V.
                          135
                                                                        9
                                             Rakhmanina, I.
Polak, Jan
                           39
                                             Rakhtiozin, R. A.
                                                                      127
                          120, 176
Polgar, Miklos
                                             Rakov, V. I.
                                                                      114
Polikarpov, D. P.
                          136
                                                                       93
                                             Rasmussen, Birger
                           38
Polikashin, L. V.
                                                                       38
                                             Rass, T. S.
                            8
Polishchuk, I.
                                                                      157
                          130
                                             Ratner, B. S.
Polyakova, N. I.
                                                                      122
                                             Rayevskiy, N. P.
Pons, J. R. Fernandez
                           73
                                                                      118
                                             Razingar, Aleksander
                           55
 Popescu, R.
                                                                      167
                                             Rebuffet, P.
                           55
 Popescu, Tudor
                                                                      166
                                             Regirer, S. A.
                          104
 Popov, 1. V.
                                                                      142
                                             Regnaud, F.
                           11
 Popov, V.
                                                                       54
                                             Reimann, Georg
                          125
 Popov, V. A.
                                                                      131
                                             Reinert, Budoli
                          152
 Porov. Yu. P.
                                                                      147
                                             Reinhardt, G.
 Popova, I. A.
                           77
```

Reinsalu, A.	18		- S -		
Remizov, O. V.	129				
Reshetnikova, A. D.	105		Sadykhova, B. A.	96	
Reshetov, G. I.	118		Sairenji, Eiko	93	
Rezycki, Wieslaw	40		Sakai, Kozo	74	
Richter, K. II.	28		Sakai, S.	103	
Richter, Klaus-Jergen	155		Sakaki, Toshio	74	
Riedel, E. J.	30		Sakov, A. D.	116	
Riedel, Hans-Jurgen	100		Samarin, A. M.	137	
Ripan, Raluca	99		Samborskiy, G.	5	
Robieux, J.	119		Samedova, S. A.	150	
Roca, Blas	72		Samoilov, B. N.	136	
Rodionov, V.	12		Samoilov, I. V.	91	
Rodionov, Ye. M.	123		Samsonov, G. V.	127, 14	0.
Rogovoy, L.	5		• • • •	163	٠,
Rolla, Stefan	33		Sander, Wilhelm	171, 17	2
Rol'nik, N. A.	115		Sapozhikov, V. N.	128	_
Roman, Zoltan	31		Sarkisov, F. A.	90	
Romanenko, Ye. V.	90		Sartre, Jean Paul	48	
Romanov, I. I.	7		Sarymsakov, A.	8	
Romanov, V. V.	135,	141	Savikina, G.	13	
Romanova, R. G.	110		Savitskiy, E. M.	137	
Roos, A.	143		Savitskiy, G.	4	
Rosenthal, Artur	168		Savitskiy, Ye. M.	139	
Rosinski, S.	1.04		Savovic, M.	24	
Rossiyevskiy, G. I.	5		Saybel' A. G.	114	
Rost, Erich	27		Sayenko, A. I.	87	
Rostovtsev, D. M.	164		Schabe, G.	26	
Rotmistrov, R.	16		Schabiltz, R.	170	
Rozehnal, Dusan	47		Schaff, Adam	48	
Rozenberg, S. Sh.	125		Scheidler, K.	54	
Rozintsevyg, S. M.	115		Scheinker, Yu. N.	97	
Rozsa, Jozsef	32		Schenck, II.	147	
Roques, C.	143		Schiaffino, P.	120	
Rubel, Louis	79		Schick, R.	27	
Rubina, L. S.	18		Schiebold, E.	148	
Rudenko, V. N.	140		Schimanski, Hans	59	
Rudiger, Walther	92		Schinke, H. J.	146	
Rudis, M. A.	128		Schinz, H. R.	154	
Rudoi, L. S.	137		Schiopu, B.	45	
Rudolph, Johannes	30		Schleicher, E.	169	
Rudzinski, J.	101		Schmid, Gerhard	102	
Ruhl, Wilhelm	171		Schmidt	120	
Rumpf, Willi	27		Schmitz, Franz	170	
Ruskov, Khristo	49		Schneider, Max	48	
Rutgers, A. J.	168		Scholz, Ernst	29	
Ruthl, Wilhelm	171		Schulten, Rudolf	132	
Ruzhitskiy, V. O.	176		Schurz, E.	169	
Ryasnyanskaya, A. G.	96		Schwartz, Wilhelm	92	
Ryzhov, O. S.	163		Schwarz, C.	146	

traliumas Hone	102	Shtutman, M. N.	141
Schwarz, Hans	27	Shubenko-Shubin, L. A.	128
Schweinberger, Willy	147	Shumskaya, L. S.	128
Schweitzer, R.		Shumyatskiy, V.	76
Schwenkenbecher, H.	30		111
Schwerutfeger, K.	144	Shupyatskiy, A. B.	
Schwidtal, Klaus	172	Shvartser, A. Ya.	136
Seeger, A.	170	Shvedova, V. P.	152
Seguinot, J.	155	Shvets, I. T.	129
Seiden, Joseph	99	Shveykin, G. P.	6
Sekerka, Ivan	141	Sidochenko, T. B.	111
Semenova, N. K.	94	Sidorov, B. K.	11
Semkov, B. F.	89	Sidorov, V. V.	111
Sena, L. A.	165	Sielezniew, Anatol	34
Senyavin, M. M.	97	Sihanouk, Narodom	66
Septelici, R.	45	Sikora, Wlodzimierz	37
Serenkov, G. P.	86	Silbiger, S.	45, 46
Sergeyev, A.	77	Silin, V. P.	161
Sergeyev, B.	7	Silyanov, Emil	22
Sermyazhko, A.	4	Simakova, T. L.	95
	26	Simkin, A. B.	151
Sestak, Miloslav	132	Simon, R.	147
Setzwein, Andreas	111		117
Sevalkina, N. A.		Sinedubskiy, V.	106
Sevenco, Elena	42	Sinel'nikov, A. S.	159
Sevruk, I. G.	163	Sirenko, G. A.	
Shabadash, A. L.	83	Sisakyan, N. M.	82
Shafranov, V. D.	158	Sisyakan, N. M.	85
Shaluakh, Tsvi	63	Skarokhodov, L. N.	127
Shao, Hsun-cheng	71	Skirdo, M.	16
Shapiro, B. S.	110	Sklyarenko, S. I.	138
Shapiro, M. B.	6	Sklyarevskiy, V. V.	136
Shapkarev, Petur	20	Sknar, N. A.	76
Shaposhnikov, V. N.	84	Skoblo, S. Ya.	137
Shaumyan, G. A.	176	Skrzynski, Tadeusz	39
Shavrin, S. V.	138	Skrzypkowski, Edward	51
Shchekoldin, A. V.	128	Skuba, A.	9
Shcherban', G.	3	Skylarov, A. E.	118
Shcherbinovskaya, T. N.	85	Slampa, Otokar	40
Shchetilin, A. P.	166	Slastenko, Ye.	5
Shchukina, M. N.	165	Slavnyy, L. B.	12
Shefter, G. M.	163	Sledzyuk, P. Ye.	6
Sheludyakov, L. N.	125	Slomyanskiy, G. A.	129
Shidlovskiy, A. A.	96	Slysh, V. I.	76
Shigehiko, Yamada	103	Slyusarov, I. T.	97
Shimamoto, S.	103	Smetana, O.	146
Shirokova, S. I.	152	Smigielski, J.	133
Shishkin, A.	3	Smirnov, A. G.	126
Shkulev, A.	7	Smirnov, E. A.	142
Sheagin, L. F.	96	Smirnov, I. V.	83
Shmakov, V. M.	128	Smirnov, N. V.	77
Shnitser, G. Ya.	129	Smol'kov, N. A.	94
Shol'ts, S. V.	1	Smorgonskiy, V. I.	12
Shono, Shiro	156	Smrcek, Karel	141
Shramov, N. N.	16	Sofiyev, Ye. I.	109
Shteinberg, B. Sh.	140	Sokolov, V.	8
Shtemenko, S.	16	Sokolovskaya, B. M.	141
	75		141
Shtoda, A. V.	70	Sokolovskiy, 0.	*

で、こののの意味が、地震に発展して発展するので、実際が、中華の名を表して表示できる。 では、2000年のである。 しゅうに あしまして できない いかけ は中国の政権 自然を持ちる はいいき は中国の政権 はない はいかい はんしゅう はいかい はいかい はんしゅう しゅうしょく

		C	1
Solis, Jose	73	Syrovoy, V. A.	166
Sol'ts, V. A.	139	Szalay, Sandor	32
Somikhina, G. S.	126	Szczepanski, St.	37
Somnicki, Roman	33	Szczypiorski, Stanislaw	35
Sorin, Pierre	168	Szederkenyi, Henrik	32
Soskin, 5. N.	13	Szekely, Geza	32
Sosnova, A. K.	150	Szepe, Gyorgy	176
Spasov, Boris	47	Szucht, Edward	174
Spauszus, S.	146	Szulkin, P.	121
Sperling, E.	132	Szymkowiak, Tadeusz	50
Spitsyn, V. I.	97		
Srb, Vladimir	54		
Sredojevic, Milos	118	- T -	
Stach, E.	100		
Stache, Peter	50	Taczanowski, Franciszek	38
Stackelberg, M. V.	102	Tai, Sung-en	64
Stahmer, Alfred	28	Taigar Simion	43
Stajner, Rikard	24	Takada, Masao	173
Stanchenko, I.	127	Takahashi, K.	149
Stangen, A.	120	Takashima, Yoichi	173
Stanisic, Milija	52	Takibayev, Zh. S.	163
Staniszewski, R.	134	Tarasevich, V.	4
Stanyukovich, K.	107	Tarasov, A. Ya.	123
Stardov, P. M.	85	Tarasov, L. K.	94
· .	164	Tareyev, E. M.	87
Starodubtsev, S. V.	37		11
Staros, Z.		Tariverdiyev, I.	173.
Stefko, J. W.	30	Tarjan, Emery	
Steinitz, Klaus	30	Taschow, Hans-Joachim	148
Stijntjes, J. A.	142	Tatara, Franciszek	39
Stockmeyer, Rolf	156	Taube, M.	94, 101
Stojanovic, T.	23	P0 *	153
Stojkovie, German	45	Teiger, J.	155
Stomakhin, I.	4	Teodorovich, O. K.	140
Strakhov, N. M.	106	Tepczynski, Edward	50
Strakhovich, K. I.	160	Teyfel, V. G.	107
Stranski, I. N.	102	Thomann, il. J.	100
Straumer, G.	30	Tiba, P.	42
Strigaleva, N. V.	95	Tichombrov, Y. L.	138
Strutinskiy, V. M.	153, 157	Tikhmenev, B. N.	116
Studitskiy, A. N.	86 ,	Tikhomirov, A. S.	11
Subbotin, M. I.	122	Tikhomirov, B. A.	107
Subbotin, V. I.	158	Tikhomirov, I. A.	98
Sucharda, B.	25	Timchenko, Vladimir	49
Sugimoto, Toshitaka	121	Timen, B. L.	97
Suhrmann, R.	102	Timma, E.	76
Sukhorukov, B. I.	165	Timofeyev, V. V.	128
Sukhov, M. P.	122	Timofeyev-Resovskiy, N. V.	110
Suslov, M. P.	127	Tiunova, N. A.	80
Sutyagina, A. A.	115	Tivader, Millner	133
Svechikov, V. M.	136	Tkachenko, A. N.	126
Sverbikhin, I.	9	Tkachenko, V. V.	104
Svetovidov, A. N.	82	Tkachuk, P.	11
Swidzinski, Henryk	36	Tkalich, V. S.	166
Swidzinski, Jerzy	34	Tkalich, Ye. F.	166
Sylwowski, G.	52	To, Quang Dau	70
•		, , G	

Toitot, M.	143		- V -		
	161				
Tolmach, I. M.	162		Vacher, II. C.	146	
Tolmasskiy, I. S.			Vacilev, V. P.	95	
Temasek, Premysl	25		Vaclavik, J.	158	
Tomic, Milorad	24			103	
Tomilin, A. G.	84		Valikana Va V		
Topor, D.	102		Valikova, Ye. V.	1	
Tottori, T.	149		Vallet, Guy	61	
Tourasse, Max	154		van der Hoeve, J.	91	
Trakhtenberg, G.	4		Vaneyer, V.	108	
Treiger, M. B.	136		Varga, Endre	32	
Tret'yachenko, G. N.	140		Varnagy, Laszlo	93	
Tret'yakova, Ye. N.	90		Vasilenko, A. V.	80	
Trofimova, A. A.	137		Vasilescu, Gh.	42	
	79		Vasilevskiy, V.	86	
Trofin, Ion	62		Vasiltsova, T. M.	80	
Troin, Jean-Francois			Vasil'yev, M.	107	
Tromel, G.	144	,		2	
Trzebiatowski, W.	101		Vasil'yev, M. V.	8	
Ts'ai, K'uo-en	160		Vdovin, A.		
Tsarevski, Nesho	23		Vegner, O. G.	116	
Tseytlin, V. Z.	139		Velarde, G.	156	
Tsvetkov, Dimitur	52		Velev, D.	49	
Tsvetkov, Vurban	21		Vernidub, I. I.	135	
Tsvetkova, Anna	14		Vernikov, V.	12	
Tsybakov, B. S.	118		Vertebnyy, Yu. P.	6	
	113		Viallard, Rodolphe	98	
Tsymbal, N. T.		00	Viehrig, H.	26	
Tsyplyatnikov, G. P.	96,	90		165	
Tu, Yung-huang	69		Vilenskiy, Yu. B.	162	
Tupitsyn, I. F.	94	٠,	Vilisov, A. A.	127	
Turkebayev, E.	6		Vinblad, A. Yu.		
Tutuchenko, S.	9		Vinski, Ivo	24	
Tyapkin, Y. D.	159		Virozub, I. Ye.	129	
Tyumentsev, N. V.	84		Vlad, C.	54	
			Vlad, N.	43	
Tyurlesanov, Khristo	21		Vlaskin, Ye.	4	
Tyutnev, Ya. A.	108		Vlasov, A. Ya.	162,	163
•			Vodop'yanov, K. A.	95	
			Vodop'yanova, N. A.	159	
- U -			Vogel, R.	144	
-			Volkova, G. A.	91	
Uberoi, R.	144		Volz, Herbert	92	
Udovichenko, A. Kh.	118		Von Ardenne, M.	132,	144
	130		Von Bogdandy, L.	144	
Ugolinkov, V. F.	145		Von Pochhammer, Wilhelm		•
Ulrich, E.				101	
Umanskiy, B. Z.	116		Von Weber, U.	147	
Unanue, Ander	99		vor dem Esche, W.		
Unger, L.	28		Voronin, M. A.	109	
Ungureanu, Cernel	134		Vorontsova, T. V.	139	167
Urazovskiy, S. S.	97		Vorozhtsov, B. I.	162,	102
Ushijima, K.	148		Voss, W.	173	
Usikov, M. P.	159		Vostrikova, A.	19	
Usikova, N. G.	95		Voszka, Rudolf	173	
Usmanov, R. F.	111		Votyakov, V.	76	

Vrubchev, Georgi	22		Yan'shin, B. I.	124	
Vvedenskiy, T. A.	122		Yan'shin, I. B.	124	
Vyatkin, A. P.	162		Yantovskiy, Ye. I.	161	
Vyshkovskiy, Yu. G.	138		Yarmolinskiy, M. B.	71	
Vyskocil, J.	91	•	Yashchenke, M. L.	97	
Vysochanskiy, M.	114		Yaskevich, A. A.	137	
vy sociiano kay ; ····			Yazdovskiy, V. I.	82	
			Yelyutin, V. P.	151	
- ₩ -			Yemel'yanov, M. D.	77	
•			Yeremenko, V. N.	164	
Walter, Rudolf	59		Yermol'yeva, Z. V.	83	
Wandel, Armin	92		Yershkov, A. I.	106	
Warnecke, R. J.	167		Yes'kov, I. N.	12	
Warzecha, Boleslaw	41		Yevenko, I. A.	1	
Weber, Egon	54		Yi, Song-gun	70	
Weber, S.	167		Yi, Song-nim	65	
Weher, Moritz	92		Yudin, B. S.	83	
Wei, Yang	47		Yuferyev, O. V.	105	
	41		Yushina, L. D.	95	
Weintraub, M.	38		Yutsis, A. P.	118,	153
Welzandt, Mieczyslaw	148		141515, 111 11	,	
Westgren, Arne	144				
Wever, F.			- Z -		
Whitwham, D.	143 154		- 2 -		
Wideroe, R.	156		Zaganescu, Fl.	79	
Wieslaw, Giryn				98	
Wiethoff, G.	147		Zaitsev, E. L.	114	
Wittmann, A.	101		Zaitsev, Yu. M.	38	
Wittmann, H. G.	92		Zajfryd, Mieczyslaw	94	
Witzke, H. D.	170		Zak, A. F.	138	
Wojterkowski, Zbigniew	38		Zakharov, I. N.	50	
Wolif, Jaap	58		Zalewski, Zdzislaw	36	
Wolnicki, Eugeniusz	57		Zarski, T.	30 37	
Workewski, C.	121		Zarzycki, Juliusz		
Wrobel, Kazimierz	39		Zatrutina, R. F.	18 69	
Wu, Ch'uan-ch'i	64		Zavodskiy, I. A.	39	
Wu, Han	69		Zawilinski, Waclaw		
Wuest, W.	132		Zayakin, B. I.	137	
Wynnyczuk, Vladimir	54		Zaychik, M.	151	
Wyszomirski, Tadousz	34		Zaytsev, V.	15	
			Zaytsev, V. P.	87	
			Zelenko, G.	151	7.2
- Y -		•	Zeley, Istvan		32
	6.5		Zemann, J.	100	
Yablonskaya, Ye. A.	87		Zenkevich, B. A.	129	
Yakhnina, N.	11		Zevakina, R. A.	111	
Yakhontova, V. E.	164		Zeynolova, G. A.	94	
Yakovlev, V. P.	118,	150	Zhabotinskiy, M. E.	117	
Yakovlev, Yu. S.	122		Zhavoronkov, N. M.	97	
Yakovleva, N. I.	110		Zhilo, N. L.	137	
Yakovlevskiy, O. V.	75		Zhui-Fyn, U.	158	
Yakubovich, A. Y.	98		Zhuin, V. V.	160	
Yakubovich, I.	8		Zhukovskiy, M. I.	76	
Yakubtsiner, M. M.	60		Zhuravel, P. A.	91 30	
Yanev, Sergey	52		Zieger, Andreas	10	
Yanina, L. V.	18		Zil'man, Ye.	10	

Zîmenkov, V. I.	130
Zimin, E. P.	125
Zlokovic, Vladimir	24
Zlotnikov, S. L.	7
Zmuda, Andrzej	40
Zornik	50
Zotimov, N. V.	109
Zotschew, Theodor	29
Zoz, N. I.	128
Zusman, Lev Lazarevich	1
Zvara, f.	94
Zvezdkin, V. I.	116
Zwas, Adam	35
Zykov, M. P.	86

^{*}This index does not include authors listed in the cover-to-cover table or contents.

UNCLASSIFIED
Central Intelligence Agency



7 September 2004

Ms. Roberta Schoen
Deputy Director for Operations
Defense Technical Information Center
7725 John J. Kingman Road
Suite 0944
Ft. Belvoir, VA 22060

Dear Ms. Schoen:

In February of this year, DTIC provided the CIA Declassification Center with a referral list of CIA documents held in the DTIC library. This referral was a follow on to the list of National Intelligence Surveys provided earlier in the year.

We have completed a declassification review of the "Non-NIS" referral list and include the results of that review as Enclosure 1. Of the 220 documents identified in our declassification database, only three are classified. These three are in the Release in Part category and may be released to the public once specified portions of the documents are removed. Sanitization instructions for these documents are included with Enclosure 1.

In addition to the documents addressed in Enclosure 1, 14 other documents were unable to be identified. DTIC then provided the CDC with hard copies of these documents in April 2004 for declassification review. The results of this review are provided as Enclosure 2.

We at CIA greatly appreciate your cooperation in this matter. Should you have any questions concerning this letter and for coordination of any further developments, please contact Donald Black of this office at (703) 613-1415.

Sincerely,

Maricy Later Screper

Chief, CIA Declassification Center, Declassification Review and Referral

Branch

Enclosures:

- 1. Declassification Review of CIA Documents at DTIC (with sanitization instructions for 3 documents)
- 2. Declassification Status of CIA Documents (hard copy) Referred by DTIC (with review processing sheets for each document)



Processing of OGA-Held CIA Documents



The following CIA documents located at DTIC were reviewed by CIA and declassification guidance has been provided.

OGA Doc ID Job Num Box Fidr Doc	Job Num	Box	Fldr	Doc	Doc ID	D Document Title	Pub Date Pages	ages	Decision	Proc Date
AD0834364	78-03109A	52	-	9	62	Consolidated Translation Survey For February 1963	2/1/1963	232	Approved For Release	3/25/2004
AD0402915	78-03109A	52	-	7	63	Consolidated Translation Survey For March 1963	3/1/1963	314	Approved For Release	3/25/2004
AD0405169	78-03109A	52	-	8	64	Consolidated Translation Survey For April 1963	4/1/1963	278	Approved For Release	3/25/2004
AD0409473	78-03109A	52	_	6	65	Consolidated Translation Survey For May 1963	5/1/1963	358	Approved For Release	3/25/2004
AD0413153	78-03109A	53	-	-	99	Consolidated Translation Survey For June 1963	6/1/1963	361	Approved For Release	3/25/2004
AD0414818	78-03109A	53	-	2	29	Consolidated Translation Survey For July 1963	7/1/1963	249	Approved For Release	3/25/2004
AD0418328	78-03109A	53	_	က	89	Consolidated Translation Survey For August 1963	8/1/1963	324	Approved For Release	3/25/2004
AD0834365	78-03109A	53	_	4	69	Consolidated Translation Survey For September 1963	9/1/1963	193	Approved For Release	3/25/2004
AD0423936	78-03109A	53	-	2	70	Consolidated Translation Survey For October 1963	10/1/1963	232	Approved For Release	3/25/2004
AD0426736	78-03109A	53	-	9	71	Consolidated Translation Survey For November 1963	11/1/1963	298	Approved For Release	3/25/2004
AD0428566	78-03109A	53	-	7	72	Consolidated Translation Survey For December 1963	12/1/1963	298	Approved For Release	3/25/2004
AD0431011	78-03109A	53	-	8	73	Consolidated Translation Survey For January 1964	1/1/1964	273	Approved For Release	3/25/2004
AD0433215	78-03109A	53	-	6	74	Consolidated Translation Survey For February 1964	2/1/1964	200	Approved For Release	3/25/2004
AD0437984	78-03109A	54	-	-	75	Consolidated Translation Survey For March 1964	3/1/1964	305	Approved For Release	3/25/2004
AD0440831	78-03109A	54	-	2	9/	Consolidated Translation Survey For April 1964	4/1/1964	155	Approved For Release	3/25/2004
AD0442174	78-03109A	54	-	က	77	Consolidated Translation Survey For May 1964	5/1/1964	249	Approved For Release	3/25/2004
AD0443106	78-03109A	24	-	4	78	Consolidated Translation Survey For June 1964	6/1/1964	191	Approved For Release	3/25/2004
AD0444756	78-03109A	54	-	2	79	Consolidated Translation Survey For July 1964	7/1/1964	169	Approved For Release	3/25/2004
AD0447557	78-03109A	24	-	9	80	Consolidated Translation Survey For August 1964	8/1/1964	153	Approved For Release	3/25/2004
AD0450482	78-03109A	54	-	7	81	Consolidated Translation Survey For September 1964	9/1/1964	141	Approved For Release	3/25/2004
AD0451428	78-03109A	24	-	œ	82	Consolidated Translation Survey For October 1964	10/1/1964	149	Approved For Release	3/25/2004
AD0453181	78-03109A	24	-	6	83	Consolidated Translation Survey For November 1964	11/1/1964	157	Approved For Release	3/25/2004
AD0455133	78-03109A	54	-	10	84	Consolidated Translation Survey For December 1964	12/1/1964	121	Approved For Release	3/25/2004
AD0456859	78-03109A	24	- -	Ξ	85	Consolidated Translation Survey For January 1965	1/1/1965	179	Approved For Release	3/25/2004
AD0458780	78-03109A	54	-	12	98	Consolidated Translation Survey For February 1965	2/1/1965	161	Approved For Release	3/25/2004
AD0461501	78-03109A	22	-	-	87	Consolidated Translation Survey For March 1965	3/1/1965	301	Approved For Release	3/25/2004